

RD&E PROGRAMS (R-1)



*Department of Defense Budget
for Fiscal Years 1998/1999*

February 1997

19970206 139

Preface

The R. D. T. & E. Programs (R-1) exhibit is derived from and consistent with the DoD Future Years Defense Program R. D. T. & E. Annex data base.

The R-1 is provided annually to the DoD oversight committees of the Congress coincident with the transmittal by the President of the Budget of the United States Government. This document is also provided to OASD (PA) for use by non-DoD activities.

Office of the Under Secretary of Defense (Comptroller)

DATE QUALITY IMPROVED 2

UNCLASSIFIED

TABLE OF CONTENTS

PAGE

DoD Component Summary

II & III

Army

Army Summary
Army R-1 Detail

A-I
A-1 through A-9

Navy

Navy Summary
Navy R-1 Detail

N-I
N-1 through N-10

Air Force

Air Force Summary
Air Force R-1 Detail

F-I
F-1 through F-11

Defense Agencies

Defensewide Summary
Defensewide R-1 Detail
Developmental Test and Evaluation Summary
Developmental Test and Evaluation R-1 Detail
Operational Test and Evaluation Summary
Operational Test and Evaluation R-1 Detail
Individual Defense Agency R-1 Detail

D-I & D-II
D-1 through D-9
D-10
D-11
D-12
D-13
D-14 through D-34

UNCLASSIFIED

UNCLASSIFIED

Department of Defense
FY 1998/1999 R D T & E Program

Exhibit R-1

Summary

Date: FEB 1997

Thousands of Dollars

	FY 1996	FY 1997	FY 1998	FY 1999
Summary By Appropriation				
Research Development Test & Eval Army	4,757,412	4,930,628	4,510,843	4,496,724
Research Development Test & Eval Navy	8,471,501	7,855,754	7,611,022	7,756,314
Research Development Test & Eval AF	12,512,814	14,068,836	14,451,379	13,799,985
Research Development Test & Eval Deifwide	9,192,442	9,438,171	9,069,680	8,689,353
Developmental Test & Eval, Defense	247,082	275,792	268,183	278,767
Operational Test & Evaluation, Defense	22,587	24,219	23,384	23,447
Total Research, Development, Test & Evaluation	35,203,838	36,593,400	35,934,491	35,044,590

UNCLASSIFIED

Page II

UNCLASSIFIED

Department of Defense
FY 1998/1999 R D T & E Program

Exhibit R-1

Summary

Date: FEB 1997

Thousands of Dollars

	FY 1996	FY 1997	FY 1998	FY 1999
Summary Recap of Budget Activities				
Basic Research	1,099,189	1,079,789	1,163,672	1,212,090
Applied Research	2,835,891	2,873,082	2,814,085	3,025,018
Advanced Technology Development	3,609,005	3,799,612	3,414,173	3,455,652
Demonstration and Validation	5,197,372	5,668,774	5,567,376	5,200,038
Engineering and Manufacturing Development	8,644,875	8,848,988	8,548,760	7,954,040
RDT&E Management Support	3,654,292	3,164,235	3,085,282	3,071,144
Operational Systems Development	10,163,214	11,158,920	11,341,143	11,126,608
Total Research, Development, Test & Evaluation	35,203,838	36,593,400	35,934,491	35,044,590
Summary Recap of FYDP Programs				
Strategic Forces	131,793	126,563	191,190	245,009
General Purpose Forces	3,206,041	3,021,715	2,904,427	2,570,930
Intelligence and Communications	6,365,128	7,663,948	8,019,315	7,814,633
Mobility Forces	16,826	79,923	133,295	218,774
Research and Development (FYDP Program 6)	25,112,583	25,302,037	24,362,526	23,772,257
Central Supply and Maintenance	191,374	214,755	107,646	146,376
Training Medical and Other	1,009	1,781	1,427	
Administration and Assoc Activities	14,718	36,859	40,853	41,741
Support of Other Nations	17,364	3,554	55,269	118,530
Special Operations Forces	147,002	142,265	118,543	116,340
Total Research, Development, Test & Evaluation	35,203,838	36,593,400	35,934,491	35,044,590

Page III

UNCLASSIFIED

UNCLASSIFIED

Department of the Army
FY 1998/1999 R D T & E Program

Exhibit R-1

Summary
Date: FEB 1997
Thousands of Dollars

Summary Recap of Budget Activities

Basic Research
Applied Research
Advanced Technology Development
Demonstration and Validation
Engineering and Manufacturing Development
RDT&E Management Support
Operational Systems Development
Total Research Development Test & Eval Army

	FY 1996	FY 1997	FY 1998	FY 1999
	181,722	179,059	198,854	210,349
	450,837	551,558	462,935	493,665
	580,033	677,676	418,322	431,696
	454,454	558,250	523,395	445,831
	1,124,738	1,141,159	1,107,393	1,162,925
	1,234,657	1,072,165	1,136,576	1,108,382
	730,971	750,761	663,368	643,876
	-----	-----	-----	-----
	4,757,412	4,930,628	4,510,843	4,496,724

Summary Recap of FYDP Programs

Strategic Forces
General Purpose Forces
Intelligence and Communications
Research and Development (FYDP Program 6)
Central Supply and Maintenance
Administration and Assoc Activities
Support of Other Nations
Total Research Development Test & Eval Army

	4,000	26,376	86,193	134,298
	560,107	541,129	403,355	354,129
	64,814	72,633	89,316	68,413
	4,094,970	4,242,671	3,874,153	3,874,693
	23,699	47,819	44,326	50,086
	322			
	9,500		13,500	15,105
	-----	-----	-----	-----
	4,757,412	4,930,628	4,510,843	4,496,724

UNCLASSIFIED

UNCLASSIFIED

Department of the Army
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 2040 A Research Development Test & Eval Army

Date: FEB 1997

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c	Thousands of Dollars
1	0601101A In-House Laboratory Independent Research	1	13,657	14,393	15,113	15,828	U
2	0601102A Defense Research Sciences	1	121,822	119,739	138,165	141,555	U
3	0601104A University and Industry Research Centers	1	46,243	44,927	45,576	52,966	U
	Basic Research		181,722	179,059	198,854	210,349	
4	0602104A TRACTOR ROSE	2	2,484	3,065			U
5	0602105A Materials Technology	2	9,858	14,530	9,811	10,979	U
6	0602120A Sensors and Electronic Survivability	2	26,675	19,351	19,294	19,682	U
7	0602122A TRACTOR HIP	2	5,603	7,981	7,242	8,170	U
8	0602211A Aviation Technology	2	17,853	21,898	27,282	30,281	U
9	0602270A EW Technology	2	14,651	15,510	16,528	18,151	U
10	0602303A Missile Technology	2	17,535	29,144	22,335	24,002	U
11	0602308A Modeling and Simulation Technology	2	19,466	20,652	21,059	24,287	U
12	0602601A Combat Vehicle and Automotive Technology	2	35,040	34,312	33,112	33,360	U
13	0602618A Ballistics Technology	2	34,647	39,913	33,317	37,598	U
14	0602622A Chemical, Smoke and Equipment Defeating Technology	2	1,728	2,259	4,739	6,691	U
15	0602623A Joint Service Small Arms Program	2	4,857	4,497	4,786	5,204	U
16	0602624A Weapons and Munitions Technology	2	24,297	22,246	26,980	30,613	U
17	0602705A Electronics and Electronic Devices	2	21,134	24,351	20,192	22,374	U
18	0602709A Night Vision Technology	2	16,442	16,636	17,304	19,213	U

Page A-1

UNCLASSIFIED

UNCLASSIFIED

Department of the Army
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 2040 A Research Development Test & Eval Army

Date: FEB 1997

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c	Thousands of Dollars
19	0602712A Countermine Systems	2		7,372	10,598	10,715	U
20	0602716A Human Factors Engineering Technology	2	15,445	15,968	14,256	15,626	U
21	0602720A Environmental Quality Technology	2	25,537	55,178	17,519	13,869	U
22	0602782A Command, Control, Communications Technology	2	13,130	14,976	16,838	18,180	U
23	0602783A Computer and Software Technology	2	3,843	6,500	679	337	U
24	0602784A Military Engineering Technology	2	33,734	38,060	36,422	40,112	U
25	0602785A Manpower/Personnel/Training Technology	2	7,254	9,329	9,014	9,019	U
26	0602786A Logistics Technology	2	26,995	21,319	17,689	18,565	U
27	0602787A Medical Technology	2	70,575	104,332	74,684	75,307	U
28	0602789A ARMY Artificial Intelligence Technology	2	2,054	2,179	1,255	1,330	U
	Applied Research		450,837	551,558	462,935	493,665	
29	0603001A Logistics Advanced Technology	3	38,820	22,724	35,469	32,197	U
30	0603002A Medical Advanced Technology	3	90,591	201,198	10,677	10,959	U
31	0603003A Aviation Advanced Technology	3	48,320	56,165	31,330	29,921	U
32	0603004A Weapons and Munitions Advanced Technology	3	29,119	29,122	18,255	29,717	U
33	0603005A Combat Vehicle and Automotive Advanced Technology	3	26,363	28,811	32,685	59,573	U
34	0603006A Command, Control, Communications Advanced Technology	3	29,323	29,379	19,688	20,911	U
35	0603007A Manpower, Personnel and Training Advanced Technology	3	4,576	4,406	3,003	3,006	U
36	0603009A TRACTOR HIKE	3	23,016	16,791	14,350	9,574	U

Page A-2

UNCLASSIFIED

UNCLASSIFIED

Department of the Army
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 2040 A Research Development Test & Eval Army

Date: FEB 1997

Thousands of Dollars

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c
37	0603013A TRACTOR DIRT	3	1,713	3,265	3,393	2,448 U
38	0603017A TRACTOR RED	3	5,369	8,445	5,572	4,953 U
39	0603020A TRACTOR ROSE	3	4,731	4,971	9,204	9,111 U
40	0603105A Military HIV Research	3	2,795	17,544	2,713	3,162 U
41	0603238A Global Surveillance/Air Defense/Precision Strike Technology Demonstratio	3	37,630	22,009	11,664	4,926 U
42	0603270A EW Technology	3	3,818	6,651	8,182	11,754 U
43	0603313A Missile and Rocket Advanced Technology	3	109,972	99,819	117,139	89,542 U
44	0603322A TRACTOR CAGE	3	8,088	8,651	6,412	5,353 U
45	0603606A Landmine Warfare and Barrier Advanced Technology	3	25,006	27,629	19,332	19,778 U
46	0603607A Joint Service Small Arms Program	3	4,516	9,049	4,754	5,148 U
47	0603654A Line-Of-Sight Technology Demonstration	3	13,396	9,791	13,000	20,000 U
48	0603710A Night Vision Advanced Technology	3	31,142	29,761	19,299	19,250 U
49	0603734A Military Engineering Advanced Technology	3	14,544	20,213	12,231	17,334 U
50	0603772A Advanced Tactical Computer Science and Sensor Technology	3	27,185	21,282	19,970	23,079 U
	Advanced Technology Development		580,033	677,676	418,322	431,696
51	0603018A TRACTOR TREAD	4	14,158	2,329		U
52	0603308A Army Missile Defense Systems Integration (Dem/Val	4	23,443	66,462	24,138	12,637 U
53	0603619A Landmine Warfare and Barrier - Adv Dev	4	35,768	27,860	18,882	11,214 U
54	0603627A Smoke, Obscurant and Target Defeating Sys-Adv Dev	4	2,623	6,246		U

UNCLASSIFIED

UNCLASSIFIED

Department of the Army
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 2040 A Research Development Test & Eval Army

Date: FEB 1997

Thousands of Dollars

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c
55	0603639A Armament Enhancement Initiative	4	58,227	63,240	40,313	18,982 U
56	0603640A Artillery Propellant Development	4	20,811	8,322	8,521	U
57	0603645A Armored System Modernization - Adv Dev	4	181,647	7,803	2,007	2,008 U
58	0603649A Engineer Mobility Equipment Advanced Development	4	13,591			U
59	0603653A Advanced Tank Armament System (ATAS)	4	9,335	11,395	8,982	8,928 U
60	0603713A Army Data Distribution System	4	6,360	23,170	21,214	10,049 U
61	0603745A Tactical Electronic Support Systems - Adv Dev	4	5,630	3,941		U
62	0603747A Soldier Support and Survivability	4	6,709	6,541	7,557	7,680 U
63	0603766A Tactical Electronic Surveillance System - Adv Dev	4	26,796	25,354	20,920	23,714 U
64	0603774A Night Vision Systems Advanced Development	4	3,167	2,769	2,939	2,893 U
65	0603790A NATO Research and Development	4		9,755	13,168	11,169 U
66	0603801A Aviation - Adv Dev	4	12,893	13,104	7,132	7,450 U
67	0603802A Weapons and Munitions - Adv Dev	4	949			U
68	0603804A Logistics and Engineer Equipment - Adv Dev	4	5,587	7,433	6,783	6,833 U
69	0603805A Combat Service Support Control System Evaluation and Analysis	4	13,228	12,689	7,673	7,783 U
70	0603807A Medical Systems - Adv Dev	4	9,878	9,996	6,765	8,700 U
71	0603851A TRACTOR CAGE (Dem/Val)	4	3,234	3,001	1,948	1,627 U
72	0603854A Artillery Systems - Dem/Val	4		238,590	324,380	294,495 U
73	0603856A SCAMP Block II Dem/Val	4		8,250	73	9,669 U
74	0603889A Counterdrug RDT&E Projects	4	420			U

Demonstration and Validation

454,454

558,250

523,395

445,831

Page A-4

UNCLASSIFIED

UNCLASSIFIED

Department of the Army
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 2040 A Research Development Test & Eval Army

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c
						Thousands of Dollars
75	0604201A Aircraft Avionics	5	20,073	14,694	21,669	12,729 U
76	0604220A Armed, Deployable OH-58D	5	688	1,130		U
77	0604223A Comanche	5	284,131	331,424	282,009	371,927 U
78	0604270A EW Development	5	62,250	73,886	66,212	51,490 U
79	0604321A All Source Analysis System	5	49,912	39,308	24,045	26,228 U
80	0604325A Follow-on to TOW	5	944	5,479	13,949	50,884 U
81	0604328A TRACTOR CAGE	5		1,524	11	303 U
82	0604604A Medium Tactical Vehicles	5	2,923	5,874	3,729	U
83	0604609A Smoke, Obscurant and Target Defeating Sys-Eng Dev	5	1,915			703 U
84	0604611A JAVELIN	5	2,249	6,014	8,018	5,277 U
85	0604619A Landmine Warfare	5	29,453	26,288	19,800	23,075 U
86	0604622A Family of Heavy Tactical Vehicles	5	2,605	1,958		U
87	0604633A Air Traffic Control	5	5,073	7,377	1,705	1,729 U
88	0604640A Advanced Command and Control Vehicle (AC2V)	5	17,306	7,734	8,867	U
89	0604641A Tactical Unmanned Ground Vehicle (TUGV)	5		2,823	2,687	2,663 U
90	0604642A Light Tactical Wheeled Vehicles	5	3,970	2,937	9,909	39,919 U
91	0604645A Armored Systems Modernization (ASM)-Eng. Dev.	5	32,425	6,585		U
92	0604649A Engineer Mobility Equipment Development	5	19,114	46,705	56,196	63,069 U
93	0604710A Night Vision Systems - Eng Dev	5	37,658	34,870	33,456	21,255 U
94	0604713A Combat Feeding, Clothing, and Equipment	5	16,049	76,428	55,964	43,539 U

Page A-5

UNCLASSIFIED

UNCLASSIFIED

Department of the Army
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 2040 A Research Development Test & Eval Army		Date: FEB 1997				
		Thousands of Dollars				
Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 e
95	0604715A Non-System Training Devices - Eng Dev	5	50,140	48,788	76,749	73,048 U
96	0604716A Terrain Information - Eng Dev	5	8,509	7,144	2,942	2,686 U
97	0604726A Integrated Meteorological Support System	5			1,946	1,931 U
98	0604739A Integrated Broadcast Service	5		4,765	4,499	4,447 U
99	0604740A Tactical Surveillance System - Eng Dev	5	2,954			U
100	0604741A Air Defense Command, Control and Intelligence - Eng Dev	5	21,810	20,031	18,350	6,698 U
101	0604746A Automatic Test Equipment Development	5	10,648	9,575	2,582	2,533 U
102	0604760A Distributive Interactive Simulations (DIS) - Engineering Development	5		15,631	20,895	9,242 U
103	0604766A Tactical Exploitation of National Capabilities - EMD (TIARA)	5	23,266	15,235	19,113	19,531 U
104	0604768A Brilliant Anti-Armor Submunition (BAT)	5	190,472	161,816	202,302	129,466 U
105	0604770A Joint Surveillance/Target Attack Radar System	5	15,302	9,624	6,940	5,670 U
106	0604778A Positioning Systems Development (SPACE)	5	436	428	419	409 U
107	0604780A Combined Arms Tactical Trainer (CATT)	5	56,282	26,110	2,823	2,866 U
108	0604801A Aviation - Eng Dev	5	4,885	5,403	5,109	6,067 U
109	0604802A Weapons and Munitions - Eng Dev	5	14,845	23,661	3,577	24,865 U
110	0604804A Logistics and Engineer Equipment - Eng Dev	5	19,132	19,903	28,039	26,932 U
111	0604805A Command, Control, Communications Systems - Eng Dev	5	16,740	9,556	11,052	16,395 U
112	0604807A Medical Materiel/Medical Biological Defense Equipment - Eng Dev	5	4,644	4,693	4,483	5,408 U
113	0604808A Landmine Warfare/Barrier - Eng Dev	5	6,802	7,556	22,605	44,133 U
114	0604814A Sense and Destroy Armament Missile - Eng Dev	5	15,764	9,934	22,372	20,813 U

Page A-6

UNCLASSIFIED

UNCLASSIFIED

Department of the Army
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 2040 A Research Development Test & Eval Army

Date: FEB 1997

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c	Thousands of Dollars	
115	0604816A LONGBOW - Eng Dev	5	21,969	10,644				U
116	0604817A Combat Identification	5	23,669	16,411	19,784			13,379 U
117	0604818A Army Tactical Command & Control Hardware & Software	5	27,231	15,780	20,022			18,697 U
118	0604820A Radar Development	5	500					U
119	0604823A Firefinder	5		2,496	2,564			12,022 U
120	0604854A Artillery Systems - EMD	5		2,937				897 U
Engineering and Manufacturing Development								
121	0604256A Threat Simulator Development	6	1,124,738	1,141,159	1,107,393			1,162,925
122	0604258A Target Systems Development	6	13,557	9,916	11,688			13,063 U
123	0604759A Major T&E Investment	6	62,154	40,833	40,449			33,407 U
124	0605103A Rand Arroyo Center	6	17,895	21,108	17,576			18,040 U
125	0605301A Army Kwajalein Atoll	6	140,930	143,789	138,769			142,125 U
126	0605502A Small Business Innovative Research	6	85,919					U
127	0605601A Army Test Ranges and Facilities	6	142,694	130,222	122,117			128,919 U
128	0605602A Army Technical Test Instrumentation and Targets	6	25,422	21,944	33,184			32,976 U
129	0605604A Survivability/Lethality Analysis	6	32,250	30,675	32,330			30,678 U
130	0605605A DOD High Energy Laser Test Facility	6	33,231	29,974	14,952			14,976 U
131	0605606A Aircraft Certification	6	2,821	2,840	2,919			2,924 U
132	0605702A Meteorological Support to RDT&E Activities	6	6,458	6,348	6,434			6,658 U

Page A-7

UNCLASSIFIED

UNCLASSIFIED

Department of the Army
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 2040 A Research Development Test & Eval Army

Date: FEB 1997

Line No	Program Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c
			Thousands of Dollars				
133	0605706A	Matériel Systems Analysis	6	17,241	14,126	29,707	28,675 U
134	0605709A	Exploitation of Foreign Items	6	8,413	7,193	7,762	4,349 U
135	0605712A	Support of Operational Testing	6	41,078	49,614	81,672	68,949 U
136	0605801A	Programwide Activities	6	64,859	59,708	86,208	85,604 U
137	0605802A	International Cooperative Research and Developmen	6	1,555	1,534	1,581	1,581 U
138	0605803A	Technical Information Activities	6	13,549	16,552	15,451	15,872 U
139	0605805A	Munitions Standardization, Effectiveness and Safety	6	16,692	3,211	6,317	5,895 U
140	0605853A	Environmental Conservation	6	2,493	1,723	1,778	2,977 U
141	0605854A	Pollution Prevention	6	11,004	13,602	5,353	4,681 U
142	0605856A	Environmental Compliance	6	65,985	54,251	51,378	47,604 U
143	0605876A	Minor Construction (RPM) - RDT&E	6	6,035	4,229	4,393	4,537 U
144	0605878A	Maintenance and Repair (RPM) - RDT&E	6	86,907	68,580	85,119	74,681 U
145	0605879A	Real Property Services (RPS) - RDT&E	6		90,457	88,945	88,936 U
146	0605896A	Base Operations - RDT&E	6	306,481	219,946	231,653	233,633 U
147	0605898A	Management Headquarters (Research and Development	6	15,007	18,407	4,837	4,765 U
148	0909999A	Financing for Cancelled Account Adjustments	6	322			U
		RDT&E Management Support		1,234,657	1,072,165	1,136,576	1,108,382
149	0603778A	MLRS Product Improvement Program	7	68,851	62,804	26,678	21,845 U
150	0102419A	Aerostat Joint Project Office	7	4,000	26,376	86,193	134,298 U

Page A-8

UNCLASSIFIED

UNCLASSIFIED

Department of the Army
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 2040 A Research Development Test & Eval Army

Date: FEB 1997

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c
						Thousands of Dollars
151	0203726A Adv Field Artillery Tactical Data System	7	36,973	38,512	39,039	34,939 U
152	0203735A Combat Vehicle Improvement Programs	7	206,625	206,816	136,520	69,443 U
153	0203740A Maneuver Control System	7	48,302	27,888	25,641	23,932 U
154	0203744A Aircraft Modifications/Product Improvement Programs	7	4,288	22,386	2,609	28,791 U
155	0203752A Aircraft Engine Component Improvement Program	7	3,703	3,834	2,940	2,933 U
156	0203758A Digitization	7	110,583	137,078	156,960	149,015 U
157	0203801A Missile/Air Defense Product Improvement Program	7	59,199	64,557	17,412	11,431 U
158	0203802A Other Missile Product Improvement Programs	7	64,920	9,874	1,255	17,011 U
159	0203806A TRACTOR RUT	7	3,346	3,112	2,111	U
160	0203808A TRACTOR CARD	7	9,521	6,766	6,690	6,693 U
161	0208010A Joint Tactical Communications Program (TRI-TAC)	7	12,647	18,229	8,983	9,941 U
162	0208053A Joint Tactical Ground System	7		2,077	3,195	U
163	0301359A Special Army Program	7	8,538	10,185	5,547	4,551 U
164	0303140A Information Systems Security Program	7	3,455	3,161	9,647	3,826 U
165	0303142A SATCOM Ground Environment (SPACE)	7	52,821	39,421	57,827	44,288 U
166	0303150A WWMCCS/Global Command and Control System	7		19,389	15,045	14,793 U
167	0305114A Traffic Control, Approach and Landing System-FY 1987 and Prior (H)	7			750	U
168	0305128A Security and Investigative Activities	7		477	500	955 U
169	0708045A End Item Industrial Preparedness Activities	7	23,699	47,819	44,326	50,086 U
170	1001018A NATO Joint STARS	7	9,500		13,500	15,105 U
Operational Systems Development			730,971	750,761	663,368	643,876
Total Research Development Test & Eval Army			4,757,412	4,930,628	4,510,843	4,496,724

UNCLASSIFIED

Page A-9

UNCLASSIFIED

Department of the Navy
FY 1998/1999 R D T & E Program

Exhibit R-1

Summary

Date: FEB 1997

Thousands of Dollars

	FY 1996	FY 1997	FY 1998	FY 1999
Summary Recap of Budget Activities				
Basic Research	371,516	352,146	382,117	399,633
Applied Research	537,711	534,805	490,273	539,070
Advanced Technology Development	472,184	501,133	433,305	470,528
Demonstration and Validation	1,712,926	1,930,143	2,135,069	2,233,510
Engineering and Manufacturing Development	2,344,798	2,143,869	2,085,768	2,032,475
RDTE Management Support	684,676	538,596	595,265	613,180
Operational Systems Development	2,347,690	1,855,062	1,489,225	1,467,918
Total Research Development Test & Eval Navy	8,471,501	7,855,754	7,611,022	7,756,314
Summary Recap of FYDP Programs				
Strategic Forces	87,453	70,880	75,203	90,662
General Purpose Forces	1,499,568	1,071,894	881,398	768,667
Intelligence and Communications	677,530	627,411	532,624	573,241
Research and Development (FYDP Program 6)	6,122,434	6,000,692	6,121,797	6,288,396
Central Supply and Maintenance	83,139	84,877		35,348
Administration and Assoc Activities	1,377			
Total Research Development Test & Eval Navy	8,471,501	7,855,754	7,611,022	7,756,314

UNCLASSIFIED

UNCLASSIFIED

Department of the Navy
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 1319 N Research Development Test & Eval Navy

Date: FEB 1997

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c
Thousands of Dollars						
1	0601152N In-House Independent Laboratory Research	1	15,004	14,683	15,834	16,236 U
2	0601153N Defense Research Sciences	1	356,512	337,463	366,283	383,397 U
Basic Research						
3	0602111N Surface/Aerospace Surveillance and Weapons Technology	2	46,015	31,921	32,273	38,833 U
4	0602121N Surface Ship Technology	2	61,717	51,399	46,859	47,353 U
5	0602122N Aircraft Technology	2	28,672	23,750	23,590	22,860 U
6	0602131M Marine Corps Landing Force Technology	2	16,871	16,374	13,043	14,535 U
7	0602232N Command, Control, and Communications Technology	2	56,534	54,735	65,566	71,426 U
8	0602233N Readiness, Training, and Environmental Quality Technology	2	47,773	47,561	31,762	33,120 U
9	0602234N Materials, Electronics and Computer Technology	2	78,105	84,724	76,653	87,445 U
10	0602270N Electronic Warfare Technology	2	17,133	21,535	22,810	24,707 U
11	0602314N Undersea Surveillance Weapon Technology	2	52,057	47,967	51,033	57,875 U
12	0602315N Mine Countermeasures, Mining and Special Warfare	2	43,553	44,602	42,737	44,575 U
13	0602435N Oceanographic and Atmospheric Technology	2	57,260	73,416	48,211	58,037 U
14	0602633N Undersea Warfare Weaponry Technology	2	32,021	36,821	35,736	38,304 U
Applied Research						
15	0603217N Air Systems and Weapons Advanced Technology	3	64,938	36,749	35,093	37,541 U
16	0603238N Precision Strike and Air Defense	3	57,471	57,903	43,320	48,094 U
17	0603270N Advanced Electronic Warfare Technology	3	14,005	14,469	18,144	18,738 U

Page N-1

UNCLASSIFIED

UNCLASSIFIED

Department of the Navy
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 1319 N Research Development Test & Eval Navy

Date: FEB 1997

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c
						Thousands of Dollars
18	0603508N Ship Propulsion System	3	17,734	32,185	39,737	46,297 U
19	0603640M Marine Corps Advanced Technology Demonstration (ATD)	3	26,148	61,127	34,178	39,617 U
20	0603706N Medical Development	3	60,185	58,928	18,332	17,043 U
21	0603707N Manpower, Personnel and Training Adv Tech Dev	3	15,772	18,490	18,812	21,641 U
22	0603712N Environmental Quality and Logistics Advanced Technology	3	21,971	39,294	18,249	20,072 U
23	0603747N Undersea Warfare Advanced Technology	3	46,430	44,099	54,785	61,844 U
24	0603782N Shallow Water MCM Demos	3	47,786	40,807	41,602	44,492 U
25	0603792N Advanced Technology Transition	3	76,503	69,052	87,285	97,269 U
26	0603794N C3 Advanced Technology	3	23,241	28,030	23,768	17,880 U
Advanced Technology Development						
27	0603207N Air/Ocean Tactical Applications	4	472,184	501,133	433,305	470,528
28	0603208N Training System Aircraft	4	2,927	2,292	16,017	20,350 U
29	0603216N Aviation Survivability	4	15,636	14,865	7,859	10,323 U
30	0603254N ASW Systems Development	4	28,860	20,928	22,869	24,879 U
31	0603261N Tactical Airborne Reconnaissance	4	21,669	23,082	10,607	1,458 U
32	0603382N Advanced Combat Systems Technology	4	2,657	3,700	5,232	8,823 U
33	0603451N Tactical Space Operations	4	911			U
34	0603502N Surface and Shallow Water Mine Countermeasures	4	54,626	84,851	58,231	67,922 U
35	0603504N Advanced Submarine Combat Systems Development	4	26,826	37,291	61,122	70,321 U

Page N-2

UNCLASSIFIED

UNCLASSIFIED

Department of the Navy
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 1319 N Research Development Test & Eval Navy

Date: FEB 1997

Thousands of Dollars

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c
36	0603506N Surface Ship Torpedo Defense	4	9,060	5,491		U
37	0603512N Carrier Systems Development	4	12,286	12,210	98,587	111,273 U
38	0603513N Shipboard System Component Development	4	16,636	17,982	19,194	30,961 U
39	0603514N Ship Combat Survivability	4	11,167	8,188	7,050	7,768 U
40	0603525N PILOT FISH	4	75,242	90,066	118,728	119,960 U
41	0603528N Non-Acoustic Anti-Submarine Warfare (ASW)	4	9,448			U
42	0603536N RETRACT JUNIPER	4	9,657	9,974	9,776	11,315 U
43	0603542N Radiological Control	4	3,084	2,769	3,030	3,677 U
44	0603553N Surface ASW	4	6,012	3,781	5,704	4,717 U
45	0603561N Advanced Submarine System Development	4	53,378	63,684	59,067	65,385 U
46	0603562N Submarine Tactical Warfare Systems	4	8,052	4,342	4,931	5,739 U
47	0603563N Ship Concept Advanced Design	4	54,946	13,242	16,198	22,254 U
48	0603564N Ship Preliminary Design & Feasibility Studies	4	10,034	12,377	38,682	45,075 U
49	0603570N Advanced Nuclear Power Systems	4	138,412	126,563	125,357	119,934 U
50	0603573N Advanced Surface Machinery Systems	4	80,993	66,055	49,741	52,089 U
51	0603576N CHALK EAGLE	4	109,593	142,945	137,442	124,734 U
52	0603582N Combat System Integration	4	6,078	3,645	7,739	9,793 U
53	0603609N Conventional Munitions	4	34,150	28,278	34,190	40,208 U
54	0603610N Advanced Warhead Development (MK-50)	4	2,893	1,270	2,012	2,820 U
55	0603611M Marine Corps Assault Vehicles	4	34,039	61,318	60,134	106,245 U

Page N-3

UNCLASSIFIED

UNCLASSIFIED

Department of the Navy
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 1319 N Research Development Test & Eval Navy

Date: FEB 1997

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 e c
Thousands of Dollars						
56	0603612M Marine Corps Mine/Countermeasures Systems - Adv Dev	4	1,652	529		1,985 U
57	0603635M Marine Corps Ground Combat/Support System	4	52,595	42,348	36,464	35,850 U
58	0603654N Joint Service Explosive Ordnance Development	4	8,278	5,844	10,701	11,758 U
59	0603658N Cooperative Engagement	4			139,229	87,556 U
60	0603711N Fleet Tactical Development	4	4,024	3,261		U
61	0603713N Ocean Engineering Technology Development	4	5,074	8,256	12,658	9,596 U
62	0603721N Environmental Protection	4	58,635	46,424	52,401	58,181 U
63	0603724N Navy Energy Program	4	1,914	2,955	4,159	4,629 U
64	0603725N Facilities Improvement	4	1,746	2,149	1,720	2,020 U
65	0603734N CHALK CORAL	4	68,782	74,448	94,358	100,154 U
66	0603746N RETRACT MAPLE	4	82,645	80,369	120,033	153,238 U
67	0603748N LINK PLUMERIA	4	20,695	34,463	29,433	16,760 U
68	0603751N RETRACT ELM	4	31,545	23,972	21,822	11,950 U
69	0603755N Ship Self Defense - Dem/Val	4	309,901	280,381	9,961	12,501 U
70	0603785N Combat Systems Oceanographic Performance Assessment	4	15,219	13,079	11,706	17,668 U
71	0603787N Special Processes	4	69,793	88,536	81,439	83,675 U
72	0603790N NATO Research and Development	4		9,528	13,330	11,267 U
73	0603795N Land Attack Technology	4	32,205	50,067	37,809	52,985 U
74	0603800N Joint Strike Fighter (JSF) - Dem/Val	4	79,981	246,076	448,855	443,522 U
75	0603851M Nonlethal Weapons - Dem/Val	4	4,590	9,591	16,807	23,515 U

Page N-4

UNCLASSIFIED

UNCLASSIFIED

Department of the Navy
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 1319 N Research Development Test & Eval Navy

Date: FEB 1997

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c
Thousands of Dollars						
76	0603852N Aersal Ship	4		23,977		U
77	0603860N Joint Precision Approach and Landing System - Dem Val	4			2,993	U
78	0604327N Hardened Target Munitions	4			4,987	U
79	0604707N Space and Electronic Warfare (SEW) Architecture/Engineering Support	4	5,376	4,960	4,705	6,677 U
	Demonstration and Validation		1,712,926	1,930,143	2,135,069	2,233,510
80	0603208N Training System Aircraft	5	-604		403	613 U
81	0603266N AH-1T Composite Rotor Blade (H)	5	10,995	69,986		U
82	0604212N Other Helo Development	5	76,289	62,674	73,354	219,570 U
83	0604214N AV-8B Aircraft - Eng Dev	5	25,479	16,089	11,034	11,230 U
84	0604215N Standards Development	5	12,936	25,367	36,297	45,295 U
85	0604217N S-3 Weapon System Improvement	5	12,013	9,553	4,735	24,049 U
86	0604218N Air/Ocean Equipment Engineering	5	5,868	5,376	6,129	7,759 U
87	0604221N P-3 Modernization Program	5	16,045	7,703	3,191	3,023 U
88	0604231N Tactical Command System	5	24,194	28,654	31,518	53,116 U
89	0604245N H-1 Upgrades	5			80,735	90,264 U
90	0604261N Acoustic Search Sensors	5	9,219	13,981	16,947	30,147 U
91	0604262N V-22A	5	717,336	552,082	529,495	272,716 U
92	0604264N Air Crew Systems Development	5	16,725	26,083	12,111	14,126 U
93	0604270N EW Development	5	87,436	121,431	101,803	127,853 U

UNCLASSIFIED

UNCLASSIFIED

Department of the Navy
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 1319 N Research Development Test & Eval Navy

Date: FEB 1997

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c
						Thousands of Dollars
94	0604307N Surface Combatant Combat System Engineering	5	87,999	88,367	87,934	115,643 U
95	0604310N Arsenal Ship	5			102,994	139,499 U
96	0604311N LPD-17 Class Systems Integration	5		4,098	471	1,662 U
97	0604312N Tri-Service Standoff Attack Missile	5			9,644	17,730 U
98	0604366N Standard Missile Improvements	5	21,404	9,240	549	1,329 U
99	0604373N Airborne MCM	5	30,462	31,141	16,503	19,937 U
100	0604503N SSN-688 and Trident Modernization	5	66,191	58,638	42,294	47,914 U
101	0604504N Air Control	5	7,438	10,294	9,298	6,417 U
102	0604507N Enhanced Modular Signal Processor	5	14,076	21,740	3,462	3,224 U
103	0604512N Shipboard Aviation Systems	5	10,938	6,285	9,225	10,494 U
104	0604516N Ship Survivability	5	4,712	3,883	6,081	7,088 U
105	0604518N Combat Information Center Conversion	5	15,154	9,848	11,325	9,781 U
106	0604524N Submarine Combat System	5	40,906	17,828	23,701	18,584 U
107	0604558N New Design SSN	5	324,302	372,217	311,076	210,363 U
108	0604561N SSN-21 Developments	5	79,411	87,524	49,542	27,731 U
109	0604562N Submarine Tactical Warfare System	5	35,457	21,837	45,663	32,376 U
110	0604567N Ship Contract Design/ Live Fire T&E	5	20,881	6,804	75,713	125,904 U
111	0604574N Navy Tactical Computer Resources	5	13,501	28,961	4,794	5,026 U
112	0604601N Mine Development	5	2,946	2,381	2,815	3,650 U
113	0604603N Unguided Conventional Air-Launched Weapons	5	50,826	30,991	28,890	5,167 U

UNCLASSIFIED

UNCLASSIFIED

Department of the Navy
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 1319 N Research Development Test & Eval Navy

Date: FEB 1997

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999	Thousands of Dollars	S
114	0604610N Lightweight Torpedo Development	5	19,947	10,832	17,290	8,129	U	
115	0604612M Marine Corps Mine Countermeasures Systems - Eng Dev	5	1,317	3,588	950	3,907	U	
116	0604618N Joint Direct Attack Munition	5	27,873	33,461	12,714	11,853	U	
117	0604654N Joint Service Explosive Ordnance Development	5	5,213	5,609	6,613	6,975	U	
118	0604703N Personnel, Training, Simulation, and Human Factor	5	1,002	972	1,022	1,252	U	
119	0604710N Navy Energy Program	5	2,518	1,903	2,088	2,535	U	
120	0604719M Marine Corps Command/Control/Communications Systems	5	10,812	4,478	4,531	5,975	U	
121	0604721N Battle Group Passive Horizon Extension System	5	7,860	82,488	71,526	78,828	U	
122	0604727N Joint Standoff Weapon Systems	5	79,901	144,144	132,270	102,790	U	
123	0604755N Ship Self Defense - EMD	5	194,715	3,021	3,620	4,397	U	
124	0604771N Medical Development	5	3,258	46,837	50,370	57,931	U	
125	0604777N Navigation/ID System	5	52,684	55,480	33,048	38,623	U	
126	0604784N Distributed Surveillance System	5	97,163	2,143,869	2,085,768	2,032,475		
	Engineering and Manufacturing Development		2,344,798	22,574	12,860	15,010	U	
127	0604256N Threat Simulator Development	6	28,234	29,686	48,308	54,766	U	
128	0604258N Target Systems Development	6	23,202	38,950	33,236	18,000	U	
129	0604759N Major T&E Investment	6	48,872	6,679	8,755	9,264	U	
130	0605152N Studies and Analysis Support - Navy	6	7,558	38,608	43,476	44,794	U	
131	0605154N Center for Naval Analyses	6	42,903					

Page N-7

UNCLASSIFIED

UNCLASSIFIED

Department of the Navy
 FY 1998/1999 R D T & E Program
 Exhibit R-1
 Appropriation: 1319 N Research Development Test & Eval Navy
 Date: FEB 1997

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 C	Thousands of Dollars
132	0605155N Fleet Tactical Development	6	2,464	2,861	2,747	3,654	U
133	0605502N Small Business Innovative Research	6	111,340				U
134	0605804N Technical Information Services	6	2,293	4,533	8,763	8,950	U
135	0605853N Management, Technical & International Support	6	17,500	19,672	24,305	26,911	U
136	0605856N Strategic Technical Support	6	2,890	1,907	2,110	2,238	U
137	0605861N RDT&E Science and Technology Management	6	60,140	55,961	57,591	56,663	U
138	0605862N RDT&E Instrumentation Modernization	6	11,509	5,946	8,546	8,544	U
139	0605863N RDT&E Ship and Aircraft Support	6	59,706	48,253	48,596	55,613	U
140	0605864N Test and Evaluation Support	6	235,938	233,908	263,934	272,624	U
141	0605865N Operational Test and Evaluation Capability	6	5,974	7,358	9,107	9,154	U
142	0605866N Navy Space and Electronic Warfare (SEW) Support	6	2,970	2,753	2,783	4,170	U
143	0605867N SEW Surveillance/Reconnaissance Support	6	11,675	11,488	11,941	13,941	U
144	0605871M Marine Corps Tactical Exploitation of National Capabilities	6	2,753				U
145	0605873M Marine Corps Program Wide Support	6	5,378	7,459	8,207	8,884	U
146	0909999N Financing for Cancelled Account Adjustments	6	1,377				U
	RDT&E Management Support		684,676	538,596	595,265	613,180	
147	0101221N Strategic Sub & Weapons System Support	7	34,666	40,082	44,419	52,124	U
148	0101224N SSBN Security Technology Program	7	28,572	23,250	24,726	30,190	U
149	0101226N Submarine Acoustic Warfare Development	7	7,479	7,548	6,058	8,348	U

UNCLASSIFIED

UNCLASSIFIED

Department of the Navy
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 1319 N Research Development Test & Eval Navy

Date: FEB 1997

Line Element No	Program Element Number	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c
			Thousands of Dollars				
170	0206625M	Marine Corps Intelligence/Electronics Warfare Systems	7	6,185			U
171	0206626M	Marine Corps Command/Control/Communications Systems	7	15,012			U
172	0207161N	Tactical AIM Missiles	7	28,103	52,463	60,079	66,040 U
173	0207163N	Advanced Medium Range Air-to-Air Missile (AMRAAM)	7	4,306	2,149	5,700	4,855 U
174	0301303N	Maritime Intelligence	7				
175	0301327N	Technical Reconnaissance and Surveillance	7				
176	0303109N	Satellite Communications (SPACE)	7	33,851	36,360	17,026	27,408 U
177	0303140N	Information Systems Security Program	7	21,383	25,525	20,291	25,301 U
178	0303150N	WMCCS/Global Command and Control System	7			498	508 U
179	0304111N	Special Activities	7				
180	0305154N	Defense Airborne Reconnaissance Program	7		7,939		U
181	0305160N	Defense Meteorological Satellite Program (SPACE)	7	25,271	13,134	3,165	9,135 U
182	0305192N	Joint Military Intelligence Programs	7			2,412	2,293 U
183	0305207N	Manned Reconnaissance Systems	7			344	342 U
184	0305889N	Counterdrug Intelligence Support	7	30,162			U
185	0305927N	Naval Space Surveillance	7	712	677	399	529 U
186	0708011N	Industrial Preparedness	7	83,139	84,877		35,348 U
Operational Systems Development							
				2,347,690	1,855,062	1,489,225	1,467,918
Total Research Development Test & Eval Navy				8,471,501	7,855,754	7,611,022	7,756,314

Page N-10

UNCLASSIFIED

UNCLASSIFIED

Department of the Air Force
FY 1998/1999 R D T & E Program

Exhibit R-1

Summary

Date: FEB 1997

Thousands of Dollars

	FY 1996	FY 1997	FY 1998	FY 1999
Summary Recap of Budget Activities				
Basic Research	216,348	210,763	226,832	230,210
Applied Research	627,055	653,892	593,354	619,463
Advanced Technology Development	517,219	473,072	402,314	431,811
Demonstration and Validation	545,720	828,397	1,149,365	1,223,026
Engineering and Manufacturing Development	4,585,123	4,520,611	4,444,276	3,712,356
RD&E Management Support	1,046,970	1,041,600	821,300	808,925
Operational Systems Development	4,974,379	6,340,501	6,813,938	6,774,194
Total Research Development Test & Eval AF	12,512,814	14,068,836	14,451,379	13,799,985

Summary Recap of FYDP Programs

Strategic Forces	40,340	29,307	29,794	20,049
General Purpose Forces	1,120,298	1,381,535	1,591,818	1,419,603
Intelligence and Communications	3,613,731	4,932,826	5,200,153	5,114,802
Mobility Forces	16,826	79,923	133,295	218,774
Research and Development (FYDP Program 6)	7,622,978	7,558,159	7,394,019	6,866,357
Central Supply and Maintenance	80,748	75,958	54,600	52,210
Training Medical and Other	1,009	1,781	1,427	6,756
Administration and Assoc Activities	9,020	5,793	6,497	101,434
Support of Other Nations	7,864	3,554	39,776	
Total Research Development Test & Eval AF	12,512,814	14,068,836	14,451,379	13,799,985

UNCLASSIFIED

UNCLASSIFIED

Department of the Air Force
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 3600 F Research Development Test & Eval AF

Date: FEB 1997

Program Line Element No Number	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c
						Thousands of Dollars
1	0601102F Defense Research Sciences	1	216,348	210,763	226,832	230,210 U
Basic Research						
2	0602102F Materials	2	71,142	77,877	70,224	74,503 U
3	0602201F Aerospace Flight Dynamics	2	60,363	62,934	60,509	65,039 U
4	0602202F Armstrong Lab Exploratory Development	2	81,171	86,382	76,102	77,002 U
5	0602203F Aerospace Propulsion	2	71,766	72,221	69,303	68,416 U
6	0602204F Aerospace Avionics	2	64,747	65,360	69,401	70,469 U
7	0602269F Hypersonic Technology Program	2	12,624	7,153	9,840	12,984 U
8	0602601F Phillips Lab Exploratory Development	2	130,112	147,712	111,136	123,514 U
9	0602602F Conventional Munitions	2	42,886	41,038	40,772	42,999 U
10	0602702F Command Control and Communications	2	92,244	93,215	86,067	84,537 U
Applied Research						
11	0603106F Logistics Systems Technology	3	627,055	653,892	593,354	619,463
12	0603108F Integrated Data Systems	3	14,406	17,332	19,753	19,706 U
13	0603112F Advanced Materials for Weapon Systems	3	29,817	25,136	20,596	21,429 U
14	0603202F Aerospace Propulsion Subsystems Integration	3	31,111	27,031	30,564	31,434 U
15	0603203F Advanced Avionics for Aerospace Vehicles	3	29,432	27,475	26,507	28,206 U
16	0603205F Flight Vehicle Technology	3	10,034	8,052	5,766	6,442 U
17	0603211F Aerospace Structures	3	12,033	9,945	15,032	17,745 U

Page F-1

UNCLASSIFIED

UNCLASSIFIED

Department of the Air Force
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 3600 F Research Development Test & Eval AF

Date: FEB 1997

Line No	Program Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c	Thousands of Dollars
18	0603216F	Aerospace Propulsion and Power Technology	3	39,365	36,506	37,014	39,836	U
19	0603227F	Personnel, Training and Simulation Technology	3	8,509	7,420	6,147	7,182	U
20	0603231F	Crew Systems and Personnel Protection Technology	3	21,684	21,442	17,204	17,966	U
21	0603238F	Global Surveillance and Communication Technology	3	2,367	2,191			U
22	0603245F	Flight Vehicle Technology Integration	3	11,379	6,132	7,795	9,828	U
23	0603253F	Advanced Avionics Integration	3	16,636	14,809	12,716	14,218	U
24	0603270F	Electronic Combat Technology	3	21,301	26,414	25,621	26,765	U
25	0603302F	Space and Missile Rocket Propulsion	3	18,162	22,353	16,247	22,037	U
26	0603311F	Ballistic Missile Technology	3	8,041	2,699			U
27	0603401F	Advanced Spacecraft Technology	3	72,456	73,215	40,846	44,679	U
28	0603410F	Space Systems Environmental Interactions Technology	3	3,187	2,793	3,151	3,527	U
29	0603601F	Conventional Weapons Technology	3	31,719	23,754	26,227	23,712	U
30	0603605F	Advanced Weapons Technology	3	73,277	54,027	41,238	41,660	U
31	0603707F	Weather Systems Technology	3	4,194	3,273	2,036	2,056	U
32	0603723F	Environmental Engineering Technology	3	8,421	7,520	4,084	4,857	U
33	0603726F	C3I Subsystem Integration	3	11,157	8,390	9,922	10,566	U
34	0603728F	Advanced Computing Technology	3	10,327	8,089	5,613	6,684	U
35	0603789F	C3 Advanced Development	3	11,832	10,389	12,897	13,501	U
36	0305176F	Combat Survivor Evader Locator	3		9,218			U
Advanced Technology Development				517,219	473,072	402,314	431,811	

Page F-2

UNCLASSIFIED

UNCLASSIFIED

Department of the Air Force
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 3600 F Research Development Test & Eval AF

Date: FEB 1997

Line No	Program Element Number	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999	Thousands of Dollars	U
37	0603260F	Intelligence Advanced Development	4	4,680	4,686	4,738	4,709	U	
38	0603319F	Airborne Laser Technology	4	20,360	54,227	157,136	296,596	U	
39	0603430F	Advanced MILSATCOM (SPACE)	4	29,155	30,453	41,448	59,507	U	
40	0603432F	Polar Adjunct (SPACE)	4	58,458	59,537	29,585	30,643	U	
41	0603434F	National Polar-orbiting Operational Environmental Satellite Sys (SPACE)	4	17,371	27,668	51,504	113,234	U	
42	0603441F	Space Based Infrared Architecture (SPACE) - Dem/Val	4	249,436	237,532	222,401	126,485	U	
43	0603617F	Command, Control, and Communication Applications	4	6,041	4,179	7,650	7,926	U	
44	0603742F	Combat Identification Technology	4	2,833	4,059	1,395	6,401	U	
45	0603790F	NATO Research and Development	4		9,783	13,433	11,341	U	
46	0603800F	Joint Strike Fighter (JSF) - Dem/Val	4	81,303	252,043	458,052	465,611	U	
47	0603851F	Intercontinental Ballistic Missile - Dem/Val	4	19,690	46,037	32,837	31,951	U	
48	0603852F	C-130J - Dem/Val	4			3,968		U	
49	0603853F	Evolved Expendable Launch Vehicle Program (SPACE) Dem/Val	4	36,894	42,333	63,260		U	
50	0603854F	Global Broadcast Service	4	14,000	43,565	56,977	62,678	U	
51	0603855F	Space Architect Office	4	5,499	10,957			U	
52	0604237F	Variable Stability In-Flight Simulator Test Aircraft	4		1,338			U	
53	0604327F	Hardened Target Munitions	4			4,981		U	
54	0208030F	War Reserve Materiel - Ammunition	4				5,944	U	
Demonstration and Validation				545,720	828,397	1,149,365	1,223,026		

UNCLASSIFIED

UNCLASSIFIED

Department of the Air Force
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 3600 F Research Development Test & Eval AF

Date: FEB 1997

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c	Thousands of Dollars
55	0604201F Integrated Avionics Planning and Development	5	14,745	17,726	16,494	7,884	U
56	0604218F Engine Model Derivative Program (EMDP)	5	714	675	741	767	U
57	0604222F Nuclear Weapons Support	5	4,516	5,655	4,782	5,005	U
58	0604226F B-1B	5	186,940	207,930	216,886	199,718	U
59	0604227F Training Systems Development	5	7,961	4,247	4,305	4,422	U
60	0604231F C-17 Program	5	71,956				U
61	0604233F Specialized Undergraduate Pilot Training	5	59,089	75,680	80,238	67,183	U
62	0604239F F-22 EMD	5	2,154,196	1,818,462	2,071,234	1,464,782	U
63	0604240F B-2 Advanced Technology Bomber	5	587,538	595,496	355,750	44,894	U
64	0604243F Manpower, Personnel and Training Development	5	4,953	4,689	4,534	4,230	U
65	0604249F Night/Precision Attack	5	6,521				U
66	0604268F Aircraft Engine Component Improvement Program	5	96,107				U
67	0604270F EW Development	5	48,674	97,458	78,465	87,889	U
68	0604321F Combat Intelligence System -EMD	5	3,619	2,791			U
69	0604441F Space Based Infrared Architecture (SPACE) - EMD	5	165,171	189,638	338,413	580,298	U
70	0604479F Milstar LDR/MDR Satellite Communications (SPACE)	5	533,613	683,685	676,690	555,050	U
71	0604480F Global Positioning System Block IIF (SPACE)	5	18,530	35,406	71,094	67,853	U
72	0604600F Munitions Dispenser Development	5	50,005	53,631	18,076	7,711	U
73	0604602F Armament/Ordnance Development	5	7,600	3,483	1,597	135	U
74	0604604F Submunitions	5	4,843	4,769	4,956	4,902	U

Page F-4

UNCLASSIFIED

UNCLASSIFIED

Department of the Air Force
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 3600 F Research Development Test & Eval AF

Date: FEB 1997

Program Line Element No Number	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999	Thousands of Dollars	e c
75	0604617F Air Base Operability	5	8,881	2,781	1,424	2,553	U	
76	0604618F Joint Direct Attack Munition	5	80,555	36,993	19,553	12,450	U	
77	0604703F Aeromedical/Chemical Defense Systems	5	5,873	5,707	4,354	2,057	U	
78	0604704F Common Support Equipment Development	5	1,310				U	
79	0604706F Life Support Systems	5	4,518	10,391	3,726	3,819	U	
80	0604708F Civil, Fire, Environmental, Shelter Engineering	5	2,580	2,617	2,698	2,770	U	
81	0604711F Systems Survivability (Nuclear Effects)	5	35	35			U	
82	0604727F Joint Standoff Weapons Systems	5	41,828	22,463	24,676	23,139	U	
83	0604735F Combat Training Ranges	5	12,744	21,926	20,331	14,875	U	
84	0604740F Computer Resource Technology Transition (CRTT)	5	8,688	1,862	1,459	1,485	U	
85	0604750F Intelligence Equipment	5	1,256	1,167	1,287	1,326	U	
86	0604754F Joint Tactical Information Distribution System (JTIDS)	5	9,077	29,321	8,557	8,616	U	
87	0604770F Joint Surveillance/Target Attack Radar System (JSTARS)	5	154,939	215,210			U	
88	0604779F Joint Interoperability of Tactical Command & Control Systems (JINTACCS)	5	5,771	5,606	5,929	5,940	U	
89	0604851F Intercontinental Ballistic Missile - EMD	5	179,685	202,153	137,944	86,990	U	
90	0604853F Evolved Expendable Launch Vehicle Program (SPACE)	5			28,376	293,950	U	
91	0207320F Sensor Fused Weapons	5			19,804	3,622	U	
92	0207325F Joint Air-to-Surface Standoff Missile (JASSM)	5	27,600	160,958	203,321	135,542	U	
93	0207414F Combat Intelligence System	5			12,267	10,499	U	
94	0303606F UHF Satellite Communications	5	12,492				U	
95	0305176F Combat Survivor Evader Locator	5			4,315		U	
Engineering and Manufacturing Development			4,585,123	4,520,611	4,444,276	3,712,356		

Page F-5

UNCLASSIFIED

UNCLASSIFIED

Department of the Air Force
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 3600 F Research Development Test & Eval AF

Date: FEB 1997

Program Line Element No Number	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c
						Thousands of Dollars
96 0603402F	Space Test Program (SPACE)	6	44,731	43,439	42,241	56,157 U
97 0604256F	Threat Simulator Development	6	57,046	53,496	51,846	36,238 U
98 0604258F	Target Systems Development	6	5,049	4,762	4,780	4,818 U
99 0604759F	Major T&E Investment	6	38,446	32,340	47,336	43,809 U
100 0605101F	RAND Project Air Force	6	23,862	21,061	21,768	21,594 U
101 0605306F	Ranch Hand II Epidemiology Study	6	3,006	8,842	10,933	4,488 U
102 0605502F	Small Business Innovation Research	6	174,857	212,854		U
103 0605704F	Theater Air Defense BMC4I	6	12,362	12,010		U
104 0605712F	Initial Operational Test & Evaluation	6	22,948	21,454	28,319	25,035 U
105 0605807F	Test and Evaluation Support	6	436,454	414,901	389,348	389,527 U
106 0605808F	Development Planning	6	6,437	6,194	6,049	6,197 U
107 0605853F	Environmental Conservation	6	8,194	10,429	11,914	12,752 U
108 0605854F	Pollution Prevention	6	13,397	19,756	5,880	4,314 U
109 0605856F	Environmental Compliance	6	26,053	21,865	17,126	21,705 U
110 0605860F	Rocket Systems Launch Program (SPACE)	6	36,900	32,218	8,013	8,023 U
111 0605876F	Minor Construction (RPM) - RDT&E	6			1,853	1,941 U
112 0605878F	Maintenance and Repair (RPM) - RDT&E	6			55,200	57,503 U
113 0605879F	Real Property Services (RPS) - RDT&E	6			49,614	47,809 U
114 0605896F	Base Operations - RDT&E	6	134,232	125,979	65,365	63,188 U
115 0909900F	Financing for Expired Account Adjustments	6	2,996			U

UNCLASSIFIED

UNCLASSIFIED

Department of the Air Force
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 3600 F Research Development Test & Eval AF

Date: FEB 1997

Line No	Program Element Number	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c
			Thousands of Dollars				
116	1001004F	International Activities	6			3,715	3,827 U
RDT&E Management Support				1,046,970	1,041,600	821,300	808,925
117	0603107F	Technical Evaluation System	7				
118	0603110F	Special Evaluation System	7				
119	0101113F	B-52 Squadrons	7	19,870	10,612	3,427	3,765 U
120	0101120F	Advanced Cruise Missile	7	6,743	1,107	2,393	U
121	0102325F	Joint Surveillance System	7	6,050	12,626	2,020	2,219 U
122	0102326F	Region/Sector Operation Control Center	7			20,512	14,065 U
123	0102411F	Modernization Program North Atlantic Defense System	7	6,702	4,962	1,442	U
124	0102412F	North Warning System (NWS)	7	975			U
125	0207129F	F-111 Squadrons	7	564			U
126	0207131F	A-10 Squadrons	7				2,358 U
127	0207133F	F-16 Squadrons	7	146,114	126,228	100,233	100,491 U
128	0207134F	F-15E Squadrons	7	160,917	150,981	137,538	109,798 U
129	0207136F	Manned Destructive Suppression	7	10,208	11,821	13,561	2,492 U
130	0207141F	F-117A Squadrons	7	3,647	11,797	9,520	5,251 U
131	0207161F	Tactical AIM Missiles	7	18,982	31,798	53,171	54,031 U
132	0207163F	Advanced Medium Range Air-to-Air Missile (AMRAAM)	7	44,202	24,745	50,781	45,985 U
133	0207217F	Podded Reconnaissance System	7	3,000	6,438	299	U

UNCLASSIFIED

UNCLASSIFIED

Department of the Air Force
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 3600 F Research Development Test & Eval AF

Line Element No	Program Element No	Item	Act	Thousands of Dollars				e
				FY 1996	FY 1997	FY 1998	FY 1999 c	
134	0207247F	AF TENCAP	7	20,556	19,102	15,251	16,277	U
135	0207248F	Special Evaluation Program	7	82,539	35,629	73,107	82,212	U
136	0207268F	Aircraft Engine Component Improvement Program	7		92,704	93,122	93,921	U
137	0207320F	Sensor Fused Weapons	7	9,517	18,695			U
138	0207323F	AGM-86C Conventional Air-Launched Cruise Missile System	7		2,875		22,091	U
139	0207412F	Theater Air Control Systems	7	535	590	393	440	U
140	0207417F	Airborne Warning and Control System (AWACS)	7	88,843	78,635	46,807	29,266	U
141	0207419F	Tactical Airborne Command and Control Systems	7	1,910	325			U
142	0207423F	Advanced Communications Systems	7	1,821	1,646	2,966	2,895	U
143	0207424F	Evaluation and Analysis Program	7	75,129	81,623	74,917	86,728	U
144	0207431F	Combat Air Intelligence System Activities	7		7,385			U
145	0207433F	Advanced Program Technology	7	140,350	66,355	95,056	65,609	U
146	0207438F	Theater Battle Management (TBM) C4I	7	27,403	32,766	24,013	35,341	U
147	0207579F	Advanced Systems Improvements	7	56,571				U
148	0207581F	Joint Surveillance and Target Attack Radar System (Joint STARS)	7			119,189	84,458	U
149	0207590F	Seek Eagle	7	13,654	15,075	17,716	19,146	U
150	0207591F	Advanced Program Evaluation	7	135,724	181,725	214,011	165,007	U
151	0207601F	USAF Modeling and Simulation	7	6,025	25,107	21,718	24,919	U
152	0208006F	Mission Planning Systems	7	19,067	17,635	16,526	17,434	U
153	0208021F	Information Warfare Support	7					

Page F-8

UNCLASSIFIED

UNCLASSIFIED

Department of the Air Force
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 3600 F Research Development Test & Eval AF

Date: FEB 1997

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 e
Thousands of Dollars						
154	0208060F Theater Missile Defenses	7	24,059	30,585	29,182	31,682 U
155	0208160F Technical Evaluation System	7		107,983	105,645	112,413 U
156	0208161F Special Evaluation System	7		39,054	40,344	52,348 U
157	0301310F Foreign Technology Division	7				
158	0301313F Defense Dissemination Program	7				
159	0301315F Missile and Space Technical Collection	7				
160	0301324F FOREST GREEN	7				
161	0301398F Management Headquarters GDIP	7			1,360	1,288 U
162	0303110F Defense Satellite Communications System (SPACE)	7	33,477	27,279	10,547	17,589 U
163	0303131F Minimum Essential Emergency Communications Network (MEECN)	7	13,068	20,842	34,409	29,019 U
164	0303140F Information Systems Security Program	7	10,381	6,548	5,298	6,589 U
165	0303141F Global Combat Support System	7			20,894	18,334 U
166	0303144F Electromagnetic Compatibility Analysis Center (ECAC)	7	1,500	7,307	7,844	7,973 U
167	0303152F World-Wide Military Command and Control Systems, Information System	7		7,299	6,820	6,650 U
168	0303601F Milstar Satellite Communications System (SPACE)	7	40,678	19,289	12,871	8,799 U
169	0304111F Special Activities	7				
170	0304311F Selected Activities	7			3,000	3,000 U
171	0305110F Satellite Control Network (SPACE)	7	74,896	82,640	80,011	104,061 U
172	0305111F Weather Service	7	5,321	4,919	9,057	8,424 U
173	0305114F Air Traffic Control, Approach, and Landing System (ATCAL)	7	5,440	7,643	6,571	925 U

Page F-9

UNCLASSIFIED

UNCLASSIFIED

Department of the Air Force
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 3600 F Research Development Test & Eval AF

Date: FEB 1997

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c	Thousands of Dollars
174	0305119F Medium Launch Vehicles (SPACE)	7	16,614	12,720	5,719	14,623	U
175	0305128F Security and Investigative Activities	7	282	275	530	467	U
176	0305137F National Airspace System (NAS) Plan	7	12,140	11,858	12,830	1,919	U
177	0305138F Upper Stage Space Vehicles (SPACE)	7	2,931	3,010	3,337	3,369	U
178	0305142F Applied Technology and Integration	7					
179	0305144F Titan Space Launch Vehicles (SPACE)	7	128,942	97,487	82,384	137,602	U
180	0305145F Arms Control Implementation	7	948	27,841			U
181	0305154F Defense Airborne Reconnaissance Program	7	29,558	4,750			U
182	0305158F Tactical Terminal	7	2,872	2,799	258	242	U
183	0305160F Defense Meteorological Satellite Program (SPACE)	7	18,221	14,769	14,076	19,143	U
184	0305164F NAVSTAR Global Positioning System (User Equipment) (SPACE)	7	16,314	29,810	46,300	68,590	U
185	0305165F NAVSTAR Global Positioning System (Space and Control Segments)	7	25,257	40,442	26,685	21,580	U
186	0305172F Combined Advanced Applications	7					
187	0305182F Eastern Space Launch Facility (ESLF) (SPACE)	7	47,943	33,956	34,186	33,472	U
188	0305906F NCMC - TW/AA System	7	56,712	29,466	7,362	5,036	U
189	0305910F SPACETRACK (SPACE)	7	54,334	31,851	28,573	14,147	U
190	0305911F Defense Support Program (SPACE)	7	33,969	25,009	23,193	39,946	U
191	0305913F NUDET Detection System (SPACE)	7	12,064	13,018	14,145	14,982	U
192	0305917F Space Architect	7			14,590	14,590	U
193	0305953F Evolved Expendable Launch Vehicle (EELV) (Space)	7				3,383	U

Page F-10

UNCLASSIFIED

UNCLASSIFIED

Department of the Air Force
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 3600 F Research Development Test & Eval AF

Date: FEB 1997

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c	Thousands of Dollars
194	0308610F Information Management-Automation-Program 3	7	9,790	14,543			U
195	0401119F C-5 Airlift Squadrons	7		1,124	9,751	14,204	U
196	0401130F C-17 Aircraft	7		71,774	113,605	202,344	U
197	0401214F Air Cargo Material Handling (463-L) (Non-IF)	7		3,145	7,947	522	U
198	0401218F KC-135S	7	11,729	715	1,992	1,704	U
199	0404102F Aerospace Rescue and Recovery	7	5,097	3,165			U
200	0702207F Depot Maintenance (Non-IF)	7	1,414	1,377	1,482	1,530	U
201	0708011F Industrial Preparedness	7	57,040	50,632	48,429	45,923	U
202	0708026F Productivity, Reliability, Availability, Maintain. Prog Ofc (PRAMPO)	7	16,840	15,842	1,032	990	U
203	0708611F Support Systems Development	7	5,454	8,107	3,657	3,767	U
204	0804734F Cryptologic/SIGINT-Related Skill Training	7	1,009	1,781	1,427		U
205	0901218F Civilian Compensation Program	7	6,024	5,793	6,497	6,756	U
206	1001004F International Activities	7	3,583	3,554			U
207	1001018F NATO Joint STARS	7	4,281		36,061	97,607	U
208	0207137F Classified Program	7					
	Operational Systems Development		4,974,379	6,340,501	6,813,938	6,774,194	
	Research Development Test & Eval AF		12,512,814	14,068,836	14,451,379	13,799,985	

UNCLASSIFIED

UNCLASSIFIED

Defensewide
FY 1998/1999 R D T & E Program

Exhibit R-1

Summary

Date: FEB 1997

Thousands of Dollars

Summary Recap of Budget Activities

Basic Research	FY 1996	FY 1997	FY 1998	FY 1999
Applied Research	329,603	337,821	355,869	371,898
Advanced Technology Development	1,220,288	1,132,827	1,267,523	1,372,820
Demonstration and Validation	2,039,569	2,147,731	2,160,232	2,121,617
Engineering and Manufacturing Development	2,484,272	2,351,984	1,759,547	1,297,671
RDT&E Management Support	590,216	1,043,349	911,323	1,046,284
Operational Systems Development	418,320	211,863	240,574	238,443
	2,110,174	2,212,596	2,374,612	2,240,620
Total Research Development Test & Eval Defwide	9,192,442	9,438,171	9,069,680	8,689,353

Summary Recap of FYDP Programs

General Purpose Forces	26,068	27,157	27,856	28,531
Intelligence and Communications	2,009,053	2,031,078	2,197,222	2,058,177
Research and Development (FYDP Program 6)	7,002,532	7,200,504	6,680,990	6,440,597
Central Supply and Maintenance	3,788	6,101	8,720	8,732
Administration and Assoc Activities	3,999	31,066	34,356	34,985
Support of Other Nations			1,993	1,991
Special Operations Forces	147,002	142,265	118,543	116,340
Total Research Development Test & Eval Defwide	9,192,442	9,438,171	9,069,680	8,689,353

UNCLASSIFIED

UNCLASSIFIED

Defensewide
FY 1998/1999 R D T & E Program

Exhibit R-1

Summary

Date: FEB 1997

Thousands of Dollars

	FY 1996	FY 1997	FY 1998	FY 1999
Summary Recap of Defensewide				
Defense Mapping Agency	71,685			116,340
Special Operations Command	147,002	142,265	118,543	312,552
Chemical and Biological Defense Program	253,491	302,602	320,846	
National Imagery And Mapping Agency				
Ballistic Missile Defense Organization	3,045,181	3,373,391	2,581,944	2,272,589
Office of Secretary/Defense	1,745,197	1,564,779	1,804,816	1,665,898
Defense Advanced Research Projects Agcy	2,269,202	2,140,436	2,206,403	2,271,934
National Security Agency				
Defense Special Weapons Agency	259,628	217,783	295,341	271,934
Defense Support Project Office	54,769	78,280	49,403	41,854
Joint Chiefs of Staff	5,526	35,836	67,189	59,924
Defense Information Systems Agency	60,630	65,802	55,845	57,980
Defense Intelligence Agency				
Central Imagery Office				
Defense Logistics Agency	74,479	83,848	102,166	89,157
Defense Investigative Service	402	412	419	418
Total Research Development Test & Eval Defwide	9,192,442	9,438,171	9,069,680	8,689,353

UNCLASSIFIED

Page D-II

UNCLASSIFIED

Defensewide
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Defwide

Date: FEB 1997

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c
Thousands of Dollars						
1	0601101D In-House Laboratory Independent Research	1	3,368	3,099	2,169	2,212 U
2	0601101E Defense Research Sciences	1	76,459	90,701	76,009	80,936 U
3	0601103D University Research Initiatives	1	214,876	214,696	237,788	247,188 U
4	0601110D Focused Research Initiatives	1	8,372			U
5	0601111D Government/Industry Cosponsorship of University Research	1			14,713	15,544 U
6	0601384BP Chemical and Biological Defense Program	1	26,528	29,325	25,190	26,018 U
Basic Research						
7	0602110E Next Generation Internet	2	329,603	337,821	355,869	371,898
8	0602160D Counterproliferation Support	2	13,599			U
9	0602173C Support Technologies - Applied Research	2	96,092	102,510	101,932	95,488 U
10	0602227D Medical Free Electron Laser	2	24,344	19,934	20,841	21,640 U
11	0602228D Historically Black Colleges and Universities (HBCU) Science and Engineer	2	13,572	10,876	11,485	14,664 U
12	0602234D Lincoln Laboratory Research Program	2	13,730	19,554	20,474	21,147 U
13	0602301E Computing Systems and Communications Technology	2	361,528	314,969	341,752	371,471 U
14	0602383E Biological Warfare Defense	2			61,600	61,800 U
15	0602384BP Chemical and Biological Defense Program	2	68,565	67,852	60,023	58,360 U
16	0602702E Tactical Technology	2	120,440	121,520	157,329	177,995 U
17	0602708E Integrated Command and Control Technology	2	44,395	59,672	37,000	40,000 U
18	0602712E Materials and Electronics Technology	2	227,848	213,843	192,192	236,730 U

Page D-1

UNCLASSIFIED

UNCLASSIFIED

Defensewide
FY 1998/1999 R D T & E Program
Appropriation: 0400 D Research Development Test & Eval Defwide

Exhibit R-1

Line Element No	Program Item	Act	Date: FEB 1997				s
			FY 1996	FY 1997	FY 1998	FY 1999 c	
							Thousands of Dollars
19	0602715H Defense Special Weapons Agency	2	227,320	192,298	211,971	221,702	U
20	0602787D Medical Technology	2	7,150	7,985	8,987	9,810	U
21	0305108K Command and Control Research	2	1,705	1,814	1,937	2,013	U
Applied Research							
22	0603002D Medical Advanced Technology	3	3,899	3,276	2,778	2,191	U
23	0603104D Explosives Demilitarization Technology	3	14,265	11,754	12,259	12,541	U
24	0603105D Military HIV Research	3	18,589				U
25	0603120D Demining	3		14,369	7,663	7,592	U
26	0603121D Alternative to Landmines	3			2,990	4,977	U
27	0603122D Counterterror Technical Support	3	16,656	21,098	34,863	37,057	U
28	0603160D Counterproliferation Support - Adv Dev	3	61,680	57,108	58,264	57,496	U
29	0603173C Support Technologies - Advanced Technology Development	3	130,611	251,294	147,557	144,902	U
30	0603225D Joint DoD-DoE Munitions Technology Development	3	20,675	17,743	16,141	16,354	U
31	0603226E Experimental Evaluation of Major Innovative Technologies	3	580,359				U
32	0603232D Automatic Target Recognition	3		4,716	4,789	4,746	U
33	0603384BP Chemical and Biological Defense Program - Advanced Development	3	26,896	43,092	41,223	40,581	U
34	0603569E Advanced Submarine Technology	3	30,797				U
35	0603570E Defense Reinvestment	3	177,852				U
36	0603704D Special Technical Support	3	16,895	17,252	11,750	11,896	U

Page D-2

UNCLASSIFIED

UNCLASSIFIED

Defensewide
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Defwide

Date: FEB 1997

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 e
Thousands of Dollars						
37	0603711H Verification Technology Demonstration	3	32,308	25,485	83,370	50,232 U
38	0603712S Generic Logistics R&D Technology Demonstrations	3	13,883	19,357	17,267	17,788 U
39	0603716D Strategic Environmental Research Program	3	54,436	53,475	54,874	57,185 U
40	0603726D Joint Technology Insertion Program	3	3,228			U
41	0603727D Joint Warfighting Program	3			14,172	22,833 U
42	0603728D Agile Port Demonstration	3		4,897		U
43	0603729D Rocket Launch Facility Upgrades	3		9,795		U
44	0603730D Airfield Surface Traffic Monitoring	3		1,959		U
45	0603738D Cooperative DoD/VA Medical Research	3	23,283	21,334		U
46	0603739E Advanced Electronics Technologies	3	389,610	360,288	277,044	282,668 U
47	0603744E Advanced Simulation	3	4,809			U
48	0603745E Semiconductor Manufacturing Technology	3	85,014			U
49	0603746E Maritime Technology	3	46,351	49,021	37,408	12,592 U
50	0603747E Electric Vehicles	3	14,694	14,707		U
51	0603750D Advanced Concept Technology Demonstrations	3	37,438	56,972	121,076	139,458 U
52	0603752D Commercial Technology Insertion Program	3		9,744	47,889	47,457 U
53	0603753S Electronic Commerce Resource Centers	3			14,972	U
54	0603755D High Performance Computing Modernization Program	3	111,620	122,900	126,211	148,852 U
55	0603760E Command, Control and Communications Systems	3		102,996	163,800	172,600 U
56	0603761E Communication and Simulation Technology	3		127,080	75,938	72,114 U

UNCLASSIFIED

UNCLASSIFIED

Defensewide
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Defwide

Date: FEB 1997

Line No	Program Element Number	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c
				Thousands of Dollars			
57	0603762E	Sensor and Guidance Technology	3		108,360	166,855	200,582 U
58	0603763E	Marine Technology	3		40,976	69,143	88,788 U
59	0603764E	Land Warfare Technology	3		63,222	82,580	96,898 U
60	0603765E	Classified DARPA Programs	3		178,040	134,977	65,500 U
61	0603800E	Joint Strike Fighter (JSF) - Dem/Val	3	28,917	72,865	23,900	U
62	0603805E	Dual Use Applications Programs	3		181,184	225,000	225,000 U
63	0603832D	Joint Wargaming Simulation Management Office	3	72,183	59,331	71,338	74,614 U
64	0303132G	Global Grid Communications	3				
65	0304211G	National Activities	3				
66	0305166G	Special Development	3				
Advanced Technology Development							
67	0603228D	Physical Security Equipment	4	2,039,569	2,147,731	2,160,232	2,121,617
68	0603708D	Integrated Diagnostics	4	9,540	9,492	6,514	6,650 U
69	0603709D	Joint Robotics Program	4	21,038	29,159	23,196	24,694 U
70	0603714D	Advanced Sensor Applications Program	4	24,539	24,937	15,379	15,744 U
71	0603736D	CALS Initiative	4	24,476	15,527	1,916	1,899 U
72	0603790D	NATO Research and Development	4	21,840	9,744	13,584	11,262 U
73	0603851D	Environmental Security Technical Certification Program	4	25,257	21,587	15,164	17,422 U
74	0603861C	Theater High-Altitude Area Defense System - TMD - Dem/Val	4	565,818	341,307	294,647	16,778 U

Page D-4

UNCLASSIFIED

UNCLASSIFIED

Defensewide
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Defensewide

Date: FEB 1997

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c	Thousands of Dollars	
75	0603863C HAWK System BM/C3 - Dem/Val	4	22,819					U
76	0603864C Theater Missile Defense BM/C3 - Dem/Val	4	27,147					U
77	0603867C Navy Area Theater Missile Defense - Dem/Val	4	277,565	59,315				U
78	0603868C Navy Theater Wide Missile Defense - Dem/Val	4	200,442	304,171	194,898		192,073	U
79	0603869C Meads Concepts - Dem/Val	4	20,123	56,232	47,956		9,509	U
80	0603870C Boost Phase Intercept Theater Missile Defense Acquisition - Dem/Val	4		23,276	12,885			U
81	0603871C National Missile Defense - Dem/Val	4	730,656	828,864	504,091		393,085	U
82	0603872C Joint Theater Missile Defense - Dem/Val	4	429,137	506,492	542,619		514,109	U
83	0603884BP Chemical and Biological Defense Program - Dem/Val	4	34,889	48,492	55,145		61,910	U
84	0603892D ASAT	4	28,534	48,975				U
85	0208043J ISLAND SUN	4	1,356	1,216				U
	Demonstration and Validation		2,484,272	2,351,984	1,759,547		1,297,671	
86	0604160D Counterproliferation Support - EMD	5	2,647	2,583				U
87	0604384BP Chemical and Biological Defense Program - EMD	5	89,606	97,476	120,535		108,006	U
88	0604771D Joint Tactical Information Distribution System (JTIDS)	5	57,886	43,360	55,429		31,633	U
89	0604861C Theater High-Altitude Area Defense System - TMD - EMD	5		277,508	261,480		578,467	U
90	0604864C Theater Missile Defense BM/C3 - EMD	5	10,118					U
91	0604865C Patriot PAC-3 Theater Missile Defense Acquisition - EMD	5	352,547	381,092	206,057		101,430	U
92	0604866C PAC-3 Risk Reduction - EMD	5	23,358					U

UNCLASSIFIED

UNCLASSIFIED

Defensewide
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Defwide

Date: FEB 1997

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 e c
		Thousands of Dollars				
93	0604867C Navy Area Theater Missile Defense - EMD	5		241,330	267,822	226,748 U
94	0305106LC Consolidated Imagery Activities	5				
95	0305107LC Tactical Imagery Activities	5				
96	0305889D Counterdrug Intelligence Support	5	12,614			U
Engineering and Manufacturing Development						
97	0605104D Technical Studies, Support and Analysis	6	30,251	30,447	38,376	40,355 U
98	0605110D Technical Support to USD(A)--Critical Technology	6	2,464	2,673	2,690	2,777 U
99	0605114E BLACK LIGHT	6	4,623	4,638	4,683	5,000 U
100	0605117D Foreign Material Acquisition and Exploitation	6	43,772	39,707	37,474	38,380 U
101	0605126J Joint Theater Air and Missile Defense Organization	6			23,100	17,850 U
102	0605128D Classified Program USD(P)	6	3,700	11,108	5,979	1,692 U
103	0605160D Counterproliferation Support	6	6,322	8,343	7,047	8,508 U
104	0605218C Ballistic Missile Defense RDT&E Program Management and Support	6	158,748			U
105	0605384BP Chemical and Biological Defense Program	6	7,007	16,365	18,730	17,677 U
106	0605502D Small Business Innovative Research	6	27,239			U
107	0605502E Small Business Innovative Research	6	42,390			U
108	0605710D Classified Programs - C3I	6	424	2,252	357	448 U
109	0605790D Small Business Innovative Research Administration	6	1,456	1,586	1,738	1,859 U
110	0605798S Defense Support Activities	6	16,858	13,121	5,992	6,056 U

Page D-6

UNCLASSIFIED

UNCLASSIFIED

Defensewide
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Defwide

Date: FEB 1997

Program Line No	Element Number	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 e c
				Thousands of Dollars			
111	0605801S	Defense Technical Information Center	6	39,950	43,382	46,930	48,171 U
112	0605803S	R&D in Support of DoD Enlistment, Testing and Evaluation	6		1,887	8,285	8,410 U
113	0605898E	Management Headquarters (Research and Development)	6	33,116	36,354	39,193	41,260 U
RDTS&E Management Support							
114	0208045K	C3 Interoperability	7	418,320	211,863	240,574	238,443
115	0208052J	Joint Analytical Model Improvement Program	7	24,712	24,941	25,670	26,648 U
116	0301011G	Cryptologic Activities	7		1,000	2,186	1,883 U
117	0301301L	General Defense Intelligence Program	7				
118	0302016K	National Military Command System-Wide Support	7	1,995	1,978	2,064	2,099 U
119	0302019K	Joint/Defense Information Systems Engineering and Integration	7	3,622	4,468	4,721	4,971 U
120	0303126K	Long-Haul Communications (DCS)	7	17,788	22,479	14,520	15,254 U
121	0303127K	Support of the National Communications System	7	3,486	3,808	4,552	4,545 U
122	0303129K	Defense Message System	7		1,353		U
123	0303131K	Minimum Essential Emergency Communications Network (MEECN)	7	2,620	2,110	2,381	2,450 U
124	0303140D	Information Systems Security Program	7	16,514			U
125	0303140G	Information Systems Security Program	7	189,019	201,895	258,593	220,301 U
126	0303149J	C4I for the Warrior	7	171	2,554	5,554	3,215 U
127	0303149K	C4I for the Warrior	7		2,851		U
128	0303153K	Joint Spectrum Center	7	4,702			U

Page D-7

UNCLASSIFIED

UNCLASSIFIED

Defensewide
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Defwide

Date: FEB 1997

Thousands of Dollars

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c
129	0304345BQ National Imagery and Mapping Program	7				
130	0305102BQ Defense Imagery and Mapping Program	7		108,976	109,430	162,664 U
131	0305127V Foreign Counterintelligence Activities	7	402	412	419	418 U
132	0305139B DMA Mapping, Charting, and Geodesy (MC&G) Production System Improvement	7	71,685			U
133	0305154D Defense Airborne Reconnaissance Program	7	600,653	469,335		U
134	0305154G Defense Airborne Reconnaissance Program	7		3,459	4,460	4,425 U
135	0305159I Defense Reconnaissance Support Activities (SPACE)	7	54,769	78,280	49,403	41,854 U
136	0305190D C3I Intelligence Programs	7	11,077	6,899	6,249	6,242 U
137	0305204D Tactical UAVs	7			122,004	42,052 U
138	0305205D Endurance UAVs	7			216,712	167,864 U
139	0305206D Airborne Reconnaissance Systems	7			212,961	169,217 U
140	0305207D Manned Reconnaissance Systems	7			27,784	11,133 U
141	0305208D Distributed Common Ground Systems	7			37,653	33,897 U
142	0305209D DARP Management Support	7			21,543	22,180 U
143	0305884L Intelligence Planning and Review Activities	7				
144	0305885G Tactical Cryptologic Activities	7	103,577	99,986	96,667	115,271 U
145	0305889G Counterdrug Intelligence Support	7	11,109			U
146	0305898L Management Headquarters (Auxiliary Forces)	7	10,423	1,849	1,926	1,914 U
147	0708011S Industrial Preparedness	7	3,788	6,101	8,720	8,732 U
148	0902298J Management Headquarters (OJCS)	7	3,999	10,012	10,035	9,806 U

UNCLASSIFIED

UNCLASSIFIED

Defensewide
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Defwide

Date: FEB 1997

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999	Thousands of Dollars	
149	0902740J Joint Simulation System	7		21,054	24,321	25,179	U	
150	1001017J Partnership for Peace Activities	7			1,993	1,991	U	
151	1160279BB Small Business Innovative Research/Small Bus Tech Transfer Pilot Prog	7	2,239	3,017			U	
152	1160401BB Special Operations Technology Development	7	3,774	5,865	4,161	4,247	U	
153	1160402BB Special Operations Advanced Technology Development	7	14,515	7,602	8,009	8,171	U	
154	1160404BB Special Operations Tactical Systems Development	7	105,201	93,855	73,073	86,216	U	
155	1160405BB Special Operations Intelligence Systems Development	7	2,880	1,946	4,914	1,839	U	
156	1160407BB SOF Medical Technology Development	7	1,747	1,803	2,029	2,077	U	
157	1160408BB SOF Operational Enhancements	7	16,646	28,177	26,357	13,790	U	
	Operational Systems Development							
			2,110,174	2,212,596	2,374,612	2,240,620		
	Total Research Development Test & Eval Defwide		9,192,442	9,438,171	9,069,680	8,689,353		

UNCLASSIFIED

UNCLASSIFIED

Defensewide
FY 1998/1999 R D T & E Program

Exhibit R-1

Summary

Date: FEB 1997

Thousands of Dollars

Summary Recap of Budget Activities

RDT&E Management Support

Total Developmental Test & Eval, Defense

Summary Recap of FYDP Programs

Research and Development (FYDP Program 6)

Total Developmental Test & Eval, Defense

	FY 1996	FY 1997	FY 1998	FY 1999
	247,082	275,792	268,183	278,767
	247,082	275,792	268,183	278,767
	247,082	275,792	268,183	278,767
	247,082	275,792	268,183	278,767

UNCLASSIFIED

UNCLASSIFIED

Defensewide
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 0450 D Developmental Test & Eval, Defense

Date: FEB 1997

Program Line Element No Number	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 e c
						Thousands of Dollars
1	0604940D Central Test and Evaluation Investment Development (CTEIP)	6	112,751	142,809	131,353	138,793 U
2	0605130D Foreign Comparative Testing	6	32,195	32,851	33,836	33,759 U
3	0605804D Development Test and Evaluation	6	102,136	100,132	102,994	106,215 U
RDT&E Management Support						
			247,082	275,792	268,183	278,767
Total Developmental Test & Eval, Defense						
			247,082	275,792	268,183	278,767

UNCLASSIFIED

Defensewide
FY 1998/1999 R D T & E Program

Exhibit R-1

Summary

Date: FEB 1997

Thousands of Dollars

	FY 1996	FY 1997	FY 1998	FY 1999
Summary Recap of Budget Activities				
RDT&E Management Support	22,587	24,219	23,384	23,447
Total Operational Test & Evaluation, Defense	22,587	24,219	23,384	23,447
Summary Recap of FYDP Programs				
Research and Development (FYDP Program 6)	22,587	24,219	23,384	23,447
Total Operational Test & Evaluation, Defense	22,587	24,219	23,384	23,447

UNCLASSIFIED

UNCLASSIFIED

Defensewide
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 0460 D Operational Test & Evaluation, Defense

Date: FEB 1997

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 e c
			Thousands of Dollars			
1	0605118D Operational Test and Evaluation	6	12,183	11,437	13,187	13,216 U
2	0605131D Live Fire Testing	6	10,404	12,782	10,197	10,231 U
RDT&E Management Support			22,587	24,219	23,384	23,447
Total Operational Test & Evaluation, Defense			22,587	24,219	23,384	23,447

UNCLASSIFIED

UNCLASSIFIED

Defense Mapping Agency
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Defwide

Date: FEB 1997

Program Line Element No Number	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c	Thousands of Dollars	
132 0305139B	DMA Mapping, Charting, and Geodesy (MC&G) Production System Improve	7	71,685					U
	Operational Systems Development		71,685					
Total	Defense Mapping Agency		71,685					

UNCLASSIFIED

Page D-14

UNCLASSIFIED

Special Operations Command
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Defwide

Date: FEB 1997

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c	Thousands of Dollars
151	1160279BB Small Business Innovative Research/Small Bus Tech Transfer Pilot Prog	7	2,239	3,017			U
152	1160401BB Special Operations Technology Development	7	3,774	5,865	4,161		4,247 U
153	1160402BB Special Operations Advanced Technology Development	7	14,515	7,602	8,009		8,171 U
154	1160404BB Special Operations Tactical Systems Development	7	105,201	93,855	73,073		86,216 U
155	1160405BB Special Operations Intelligence Systems Development	7	2,880	1,946	4,914		1,839 U
156	1160407BB SOF Medical Technology Development	7	1,747	1,803	2,029		2,077 U
157	1160408BB SOF Operational Enhancements	7	16,646	28,177	26,357		13,790 U
	Operational Systems Development		147,002	142,265	118,543		116,340
Total	Special Operations Command		147,002	142,265	118,543		116,340

UNCLASSIFIED

Chemical and Biological Defense Program
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Defwide

Date: FEB 1997

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c	Thousands of Dollars
6	0601384BP Chemical and Biological Defense Program	1	26,528	29,325	25,190	26,018	U
	Basic Research		26,528	29,325	25,190	26,018	
15	0602384BP Chemical and Biological Defense Program	2	68,565	67,852	60,023	58,360	U
	Applied Research		68,565	67,852	60,023	58,360	
33	0603384BP Chemical and Biological Defense Program - Advanced Development	3	26,896	43,092	41,223	40,581	U
	Advanced Technology Development		26,896	43,092	41,223	40,581	
83	0603884BP Chemical and Biological Defense Program - Dem/Val	4	34,889	48,492	55,145	61,910	U
	Demonstration and Validation		34,889	48,492	55,145	61,910	
87	0604384BP Chemical and Biological Defense Program - EMD	5	89,606	97,476	120,535	108,006	U
	Engineering and Manufacturing Development		89,606	97,476	120,535	108,006	
105	0605384BP Chemical and Biological Defense Program	6	7,007	16,365	18,730	17,677	U
	RDT&E Management Support		7,007	16,365	18,730	17,677	
Total	Chemical and Biological Defense Program		253,491	302,602	320,846	312,552	

UNCLASSIFIED

UNCLASSIFIED

National Imagery And Mapping Agency
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Defwide

Date: FEB 1997

Program Line Element No Number	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 e c
			Thousands of Dollars			
129	0304345BQ National Imagery and Mapping Program	7				
130	0305102BQ Defense Imagery and Mapping Program	7		108,976	109,430	162,664
Operational Systems Development						
Total National Imagery And Mapping Agency						

UNCLASSIFIED

Ballistic Missile Defense Organization
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Defwide

Date: FEB 1997

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999	Thousands of Dollars	S
9	0602173C Support Technologies - Applied Research	2	96,092	102,510	101,932	95,488	U	
	Applied Research							
29	0603173C Support Technologies - Advanced Technology Development	3	130,611	251,294	147,557	144,902	U	
	Advanced Technology Development							
74	0603861C Theater High-Altitude Area Defense System - TMD - Dem/Val	4	565,818	341,307	294,647	16,778	U	
75	0603863C HAWK System BM/C3 - Dem/Val	4	22,819				U	
76	0603864C Theater Missile Defense BM/C3 - Dem/Val	4	27,147				U	
77	0603867C Navy Area Theater Missile Defense - Dem/Val	4	277,565	59,315			U	
78	0603868C Navy Theater Wide Missile Defense - Dem/Val	4	200,442	304,171	194,898	192,073	U	
79	0603869C Meads Concepts - Dem/Val	4	20,123	56,232	47,956	9,509	U	
80	0603870C Boost Phase Intercept Theater Missile Defense Acquisition - Dem/Val	4		23,276	12,885		U	
81	0603871C National Missile Defense - Dem/Val	4	730,656	828,864	504,091	393,085	U	
82	0603872C Joint Theater Missile Defense - Dem/Val	4	429,137	506,492	542,619	514,109	U	
	Demonstration and Validation							
89	0604861C Theater High-Altitude Area Defense System - TMD - EMD	5	2,273,707	2,119,657	1,597,096	1,125,554	U	
90	0604864C Theater Missile Defense BM/C3 - EMD	5	10,118		261,480	578,467	U	
91	0604865C Patriot PAC-3 Theater Missile Defense Acquisition - EMD	5	352,547	381,092	206,057	101,430	U	
92	0604866C PAC-3 Risk Reduction - EMD	5	23,358				U	

UNCLASSIFIED

UNCLASSIFIED

Ballistic Missile Defense Organization
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Defwide

Date: FEB 1997

Program Line Element No Number	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 e c
			Thousands of Dollars			
93	0604867C Navy Area Theater Missile Defense - EMD	5		241,330	267,822	226,748 U
	Engineering and Manufacturing Development					
104	0605218C Ballistic Missile Defense RDT&E Program Management and Support	6	386,023	899,930	735,359	906,645
	RDT&E Management Support		158,748			
Total	Ballistic Missile Defense Organization		3,045,181	3,373,391	2,581,944	2,272,589

UNCLASSIFIED

Office of Secretary/Defense
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Defwide

Date: FEB 1997

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c
						Thousands of Dollars
1	0601101D In-House Laboratory Independent Research	1	3,368	3,099	2,169	2,212 U
3	0601103D University Research Initiatives	1	214,876	214,696	237,788	247,188 U
4	0601110D Focused Research Initiatives	1	8,372			U
5	0601111D Government/Industry Cosponsorship of University Research	1			14,713	15,544 U
Basic Research						
8	0602160D Counterproliferation Support	2	13,599	217,795	254,670	264,944
10	0602227D Medical Free Electron Laser	2	24,344	19,934	20,841	21,640 U
11	0602228D Historically Black Colleges and Universities (HBCU) Science and Engineer	2	13,572	10,876	11,485	14,664 U
12	0602234D Lincoln Laboratory Research Program	2	13,730	19,554	20,474	21,147 U
20	0602787D Medical Technology	2	7,150	7,985	8,987	9,810 U
Applied Research						
22	0603002D Medical Advanced Technology	3	72,395	58,349	61,787	67,261
23	0603104D Explosives Demilitarization Technology	3	3,899	3,276	2,778	2,191 U
24	0603105D Military HIV Research	3	14,265	11,754	12,259	12,541 U
25	0603120D Demining	3	18,589			U
26	0603121D Alternative to Landmines	3		14,369	7,663	7,592 U
27	0603122D Counterterror Technical Support	3	16,656	21,098	34,863	37,057 U
28	0603160D Counterproliferation Support - Adv Dev	3	61,680	57,108	58,264	57,496 U
30	0603225D Joint DoD-DoE Munitions Technology Development	3	20,675	17,743	16,141	16,354 U

UNCLASSIFIED

UNCLASSIFIED

Office of Secretary/Defense
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Defwide

Date: FEB 1997

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c
						Thousands of Dollars
32	0603232D Automatic Target Recognition	3		4,716	4,789	4,746 U
36	0603704D Special Technical Support	3	16,895	17,252	11,750	11,896 U
39	0603716D Strategic Environmental Research Program	3	54,436	53,475	54,874	57,185 U
40	0603726D Joint Technology Insertion Program	3	3,228			U
41	0603727D Joint Warfighting Program	3			14,172	22,833 U
42	0603728D Agile Port Demonstration	3		4,897		U
43	0603729D Rocket Launch Facility Upgrades	3		9,795		U
44	0603730D Airfield Surface Traffic Monitoring	3		1,959		U
45	0603738D Cooperative DoD/VA Medical Research	3	23,283	21,334		U
51	0603750D Advanced Concept Technology Demonstrations	3	37,438	56,972	121,076	139,458 U
52	0603752D Commercial Technology Insertion Program	3		9,744	47,889	47,457 U
54	0603755D High Performance Computing Modernization Program	3	111,620	122,900	126,211	148,852 U
63	0603832D Joint Wargaming Simulation Management Office	3	72,183	59,331	71,338	74,614 U
Advanced Technology Development						
67	0603228D Physical Security Equipment	4	454,847	487,723	587,057	645,249
68	0603708D Integrated Diagnostics	4	9,540	9,492	6,514	6,650 U
69	0603709D Joint Robotics Program	4	21,038	29,159	23,196	24,694 U
70	0603714D Advanced Sensor Applications Program	4	24,539	24,937	15,379	15,744 U
71	0603736D CALS Initiative	4	24,476	15,527	1,916	1,899 U

UNCLASSIFIED

UNCLASSIFIED

Office of Secretary/Defense
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Defwide

Program Line Element No	Item	Act	Date: FEB 1997				e
			FY 1996	FY 1997	FY 1998	FY 1999	
							Thousands of Dollars
72	0603790D NATO Research and Development	4	21,840	9,744	13,584	11,262	U
73	0603851D Environmental Security Technical Certification Program	4	25,257	21,587	15,164	17,422	U
84	0603892D ASAT	4	28,534	48,975			U
Demonstration and Validation							
86	0604160D Counterproliferation Support - EMD	5	2,647	2,583	107,306	110,207	U
88	0604771D Joint Tactical Information Distribution System (JTIDS)	5	57,886	43,360	55,429	31,633	U
96	0305889D Counterdrug Intelligence Support	5	12,614				U
Engineering and Manufacturing Development							
97	0605104D Technical Studies, Support and Analysis	6	73,147	45,943	55,429	31,633	
98	0605110D Technical Support to USD(A)--Critical Technology	6	2,464	2,673	2,690	2,777	U
100	0605117D Foreign Material Acquisition and Exploitation	6	43,772	39,707	37,474	38,380	U
102	0605128D Classified Program USD(P)	6	3,700	11,108	5,979	1,692	U
103	0605160D Counterproliferation Support	6	6,322	8,343	7,047	8,508	U
106	0605502D Small Business Innovative Research	6	27,239				U
108	0605710D Classified Programs - C3I	6	424	2,252	357	448	U
109	0605790D Small Business Innovative Research Administration	6	1,456	1,586	1,738	1,859	U
RDT&E Management Support							
124	0303140D Information Systems Security Program	7	115,628	96,116	93,661	94,019	U

UNCLASSIFIED

UNCLASSIFIED

Office of Secretary/Defense
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Defwide

Date: FEB 1997

Program Line Element No Number	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c	Thousands of Dollars
133 0305154D	Defense Airborne Reconnaissance Program	7	600,653	469,335			U
136 0305190D	C3I Intelligence Programs	7	11,077	6,899	6,249	6,242	U
137 0305204D	Tactical UAVs	7			122,004	42,052	U
138 0305205D	Endurance UAVs	7			216,712	167,864	U
139 0305206D	Airborne Reconnaissance Systems	7			212,961	169,217	U
140 0305207D	Manned Reconnaissance Systems	7			27,784	11,133	U
141 0305208D	Distributed Common Ground Systems	7			37,653	33,897	U
142 0305209D	DARP Management Support	7			21,543	22,180	U
Operational Systems Development							
			628,244	476,234	644,906	452,585	
Total Office of Secretary/Defense							
			1,745,197	1,564,779	1,804,816	1,665,898	

UNCLASSIFIED

UNCLASSIFIED

Defense Advanced Research Projects Agency
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Defwide

Date: FEB 1997

Program Line Element No Number	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 e
						Thousands of Dollars
2	0601101E Defense Research Sciences	1	76,459	90,701	76,009	80,936 U
Basic Research						
7	0602110E Next Generation Internet	2				
13	0602301E Computing Systems and Communications Technology	2	361,528	314,969	341,752	371,471 U
14	0602383E Biological Warfare Defense	2			61,600	61,800 U
16	0602702E Tactical Technology	2	120,440	121,520	157,329	177,995 U
17	0602708E Integrated Command and Control Technology	2	44,395	59,672	37,000	40,000 U
18	0602712E Materials and Electronics Technology	2	227,848	213,843	192,192	236,730 U
Applied Research						
31	0603226E Experimental Evaluation of Major Innovative Technologies	3	580,359	710,004	829,873	927,996 U
34	0603569E Advanced Submarine Technology	3	30,797			U
35	0603570E Defense Reinvestment	3	177,852			U
46	0603739E Advanced Electronics Technologies	3	389,610	360,288	277,044	282,668 U
47	0603744E Advanced Simulation	3	4,809			U
48	0603745E Semiconductor Manufacturing Technology	3	85,014			U
49	0603746E Maritime Technology	3	46,351	49,021	37,408	12,592 U
50	0603747E Electric Vehicles	3	14,694	14,707		U
55	0603760E Command, Control and Communications Systems	3		102,996	163,800	172,600 U
56	0603761E Communication and Simulation Technology	3		127,080	75,938	72,114 U

UNCLASSIFIED

UNCLASSIFIED

Defense Advanced Research Projects Agency
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Defwide

Date: FEB 1997

Program Line Element No Number	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c	Thousands of Dollars	S
57	0603762E Sensor and Guidance Technology	3		108,360	166,855	200,582	U	
58	0603763E Marine Technology	3		40,976	69,143	88,788	U	
59	0603764E Land Warfare Technology	3		63,222	82,580	96,898	U	
60	0603765E Classified DARPA Programs	3		178,040	134,977	65,500	U	
61	0603800E Joint Strike Fighter (JSF) - Dem/Val	3	28,917	72,865	23,900		U	
62	0603805E Dual Use Applications Programs	3		181,184	225,000	225,000	U	
	Advanced Technology Development		1,358,403	1,298,739	1,256,645	1,216,742		
99	0605114E BLACK LIGHT	6	4,623	4,638	4,683	5,000	U	
107	0605502E Small Business Innovative Research	6	42,390				U	
113	0605898E Management Headquarters (Research and Development	6	33,116	36,354	39,193	41,260	U	
	RDT&E Management Support		80,129	40,992	43,876	46,260		
Total	Defense Advanced Research Projects Agency		2,269,202	2,140,436	2,206,403	2,271,934		

UNCLASSIFIED

UNCLASSIFIED

National Security Agency
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Defwide

Date: FEB 1997

Program Line Element No	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999	Thousands of Dollars	
64	0303132G Global Grid Communications	3						
65	0304211G National Activities	3						
66	0305166G Special Development	3						
Advanced Technology Development								
116	0301011G Cryptologic Activities	7						
125	0303140G Information Systems Security Program	7	189,019	201,895	258,593			220,301 U
134	0305154G Defense Airborne Reconnaissance Program	7	3,450	3,459	4,460			4,425 U
144	0305885G Tactical Cryptologic Activities	7	103,577	99,986	96,667			115,271 U
145	0305889G Counterdrug Intelligence Support	7	11,109					U
Operational Systems Development								
Total National Security Agency								

UNCLASSIFIED

Page D-26

UNCLASSIFIED

Defense Special Weapons Agency
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Defwide

Date: FEB 1997

Program Line Element No Number	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c	Thousands of Dollars	S e
19	0602715H Defense Special Weapons Agency	2	227,320	192,298	211,971	221,702	U	
	Applied Research		227,320	192,298	211,971	221,702		
37	0603711H Verification Technology Demonstration	3	32,308	25,485	83,370	50,232	U	
	Advanced Technology Development		32,308	25,485	83,370	50,232		
Total	Defense Special Weapons Agency		259,628	217,783	295,341	271,934		

UNCLASSIFIED

Defense Support Project Office
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Defwide		Date: FEB 1997				
		Thousands of Dollars				
Program Line Element No Number	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c
135	0305159I Defense Reconnaissance Support Activities (SPACE) 7		54,769	78,280	49,403	41,854 U
	Operational Systems Development		54,769	78,280	49,403	41,854
Total	Defense Support Project Office		54,769	78,280	49,403	41,854

UNCLASSIFIED

Joint Chiefs of Staff
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Defwide

Date: FEB 1997

Program Line Element No Number	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 e c
		Thousands of Dollars				
85	0208043J ISLAND SUN	4	1,356	1,216		U
Demonstration and Validation						
101	0605126J Joint Theater Air and Missile Defense Organizatio	6	1,356	1,216	23,100	17,850 U
RDT&E Management Support						
115	0208052J Joint Analytical Model Improvement Program	7		1,000	2,186	1,883 U
126	0303149J C4I for the Warrior	7	171	2,554	5,554	3,215 U
148	0902298J Management Headquarters (OJCS)	7	3,999	10,012	10,035	9,806 U
149	0902740J Joint Simulation System	7		21,054	24,321	25,179 U
150	1001017J Partnership for Peace Activities	7			1,993	1,991 U
Operational Systems Development						
			4,170	34,620	44,089	42,074
Total	Joint Chiefs of Staff		5,526	35,836	67,189	59,924

UNCLASSIFIED

UNCLASSIFIED

Defense Information Systems Agency
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Defwide

Date: FEB 1997

Program Line Element No Number	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999	Thousands of Dollars	Thousands of Dollars
21	0305108K Command and Control Research	2	1,705	1,814	1,937	2,013	U	
	Applied Research							
114	0208045K C3 Interoperability	7	24,712	24,941	25,670	26,648	U	
118	0302016K National Military Command System-Wide Support	7	1,995	1,978	2,064	2,099	U	
119	0302019K Joint/Defense Information Systems Engineering and Integration	7	3,622	4,468	4,721	4,971	U	
120	0303126K Long-Haul Communications (DCS)	7	17,788	22,479	14,520	15,254	U	
121	0303127K Support of the National Communications System	7	3,486	3,808	4,552	4,545	U	
122	0303129K Defense Message System	7		1,353			U	
123	0303131K Minimum Essential Emergency Communications Network (MEECN)	7	2,620	2,110	2,381	2,450	U	
127	0303149K C4I for the Warrior	7		2,851			U	
128	0303153K Joint Spectrum Center	7	4,702				U	
	Operational Systems Development							
			58,925	63,988	53,908	55,967		
			60,630	65,802	55,845	57,980		
	Total Defense Information Systems Agency							

UNCLASSIFIED

UNCLASSIFIED

Defense Intelligence Agency
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Defwide

Date: FEB 1997

Program Line Element No Number	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 e c
			Thousands of Dollars			
117	0301301L General Defense Intelligence Program	7				
143	0305884L Intelligence Planning and Review Activities	7				
146	0305898L Management Headquarters (Auxiliary Forces)	7	10,423	1,849	1,926	1,914 U
Operational Systems Development						
Total Defense Intelligence Agency						

UNCLASSIFIED

Page D-31

UNCLASSIFIED

Central Imagery Office
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Defwide

Date: FEB 1997

Thousands of Dollars

Program Line Element No Number	Item	Act ---	FY 1996 -----	FY 1997 -----	FY 1998 -----	FY 1999 c -----
94	0305106LC Consolidated Imagery Activities	5				
95	0305107LC Tactical Imagery Activities	5				
	Engineering and Manufacturing Development					
Total	Central Imagery Office					

UNCLASSIFIED

Page D-32

UNCLASSIFIED

Defense Logistics Agency
FY 1998/1999 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Defwide		Date: FEB 1997				
Program Line Element No Number	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c
			Thousands of Dollars			
38	0603712S Generic Logistics R&D Technology Demonstrations	3	13,883	19,357	17,267	17,788 U
53	0603753S Electronic Commerce Resource Centers	3			14,972	U
Advanced Technology Development						
110	0605798S Defense Support Activities	6	16,858	13,121	5,992	6,056 U
111	0605801S Defense Technical Information Center	6	39,950	43,382	46,930	48,171 U
112	0605803S R&D in Support of DoD Enlistment, Testing and Evaluation	6		1,887	8,285	8,410 U
RDT&E Management Support						
147	0708011S Industrial Preparedness	7	3,788	6,101	8,720	8,732 U
Operational Systems Development						
Total Defense Logistics Agency			74,479	83,848	102,166	89,157

UNCLASSIFIED

UNCLASSIFIED

Defense Investigative Service
FY 1996/1999 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Defwide

Date: FEB 1997

Program Line Element No Number	Item	Act	FY 1996	FY 1997	FY 1998	FY 1999 c
131 0305127V	Foreign Counterintelligence Activities	7	402	412	419	418 U
	Operational Systems Development		402	412	419	418
Total	Defense Investigative Service		402	412	419	418

UNCLASSIFIED

Page D-34